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IMPACT OF TRADE ON EMPLOYMENT

HEARINGS

BEFORE THE

SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

OVERSIGHT ON HOW TRADE POLICIES OF THIS COUNTRY REFLECT UPON JOBS AND JOB CREATION

OCTOBER 22, 31, AND NOVEMBER 12, 1985

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IMPACT OF TRADE ON EMPLOYMENT

TUESDAY, OCTOBER 22, 1985

U.S. Senate,
Subcommittee on Employment and Productivity,
Committee on Labor and Human Resources,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:06 a.m., in room SD-430, Dirksen Senate Office Building, Senator Dan Quayle (chairman of the subcommittee) presiding.

Present: Senators Quayle, Simon, and Grassley.

OPENING STATEMENT OF SENATOR QUAYLE

Senator Quayle. I think we will go ahead and begin. I know that other Senators are on their way.

This is the first in a series of hearings that the Employment and Productivity Subcommittee is going to have on the rather explosive issue of trade. Trade has been a much discussed issue. I think that in my years of service in the House and in the Senate, I have probably begun to see it surface more, and be debated in a more vehement way, this year than any other year that I have been here.

Obviously, the desire to have a serious discussion on trade is based on the idea of how the overall trade policies of this country reflect upon jobs and job creation. There is no doubt that in the past, there was a strong free trade lobby in this community, and around the country. I would say today that there is no longer a strong free trade lobby, because almost every single industry, in some way or another, is affected by imports that come into this country. Therefore, they say, well, yes, we are for free trade, but it must be fair—and there are a lot of caveats today that are expressed.

"Fair free trade" is now the code word, rather than "free trade," which has developed a past history. In response to the political climate and situation that we see, we now have over 300 protectionist bills that have been introduced in the Congress. One of them has already passed the House of Representatives, the textile bill. The bill is still pending in the Senate.

But beyond the imports that have a direct impact on jobs, loss of jobs, and the potential loss of jobs, I think that we have got to focus on some other things. We have got to look at the value of the dollar. We have got to look at the high interest rates. We have got to discuss the labor differential. We have got to look at whether these industries, in fact, have modernized.

What I am trying to achieve with these hearings is to present a record and a discussion of an exceedingly complex issue. I do not think there is any simple answer to the trade problem. I want to explore this issue as in depth as we possibly can. We have tremendous witnesses here today, with the Secretary of Labor and three outstanding economists who will give us their viewpoints.

The trade issue, in my opinion, has to be looked at from a couple of perspectives. One, I think in the short term, we have got to look at what we can do for these dislocated workers and their transition back into the work force. There are some short-term remedies that can be applied.

I know in my own State of Indiana, we have had a tremendous dislocation and the loss of thousands of steelworkers, particularly in northwest Indiana. And one of the things that we have concentrated on a lot is title III of the JTPA, and the Department of Labor has been very helpful in giving us special assistance up there with some of the discretionary funds that they have. We have been working with the steelworkers and working with management there to set up a job training site, where these individuals who are economically dislocated have the potential for receiving some training and some education for future employment. That is sort of a short-term response to a problem, but it is one that I think, from a political and economic and a social point of view, makes a lot of sense.

Another issue is how do we really identify truly those industries that need help from subsidies, dumping, and illicit and unfair trade that is coming into this country. How do we really make that determination and separate out those who say, "Hey, we are being hurt by imports, and it is no fault of their own." Those people fall into two groups—one group, who really are speaking the gospel that they are in fact the target of unfair subsidized trade coming from foreign competition. Then there are others that, perhaps, simply have not done an adequate job, can no longer compete, but yet would make the same allegation about unfair trading practices. When you get into those situations, you find out that that is not necessarily the case.

The subcommittee will hold three hearings on trade and unemployment. The first is today, and the second and third hearings are scheduled for October 31 and November 12, respectfully, and we will be examining the effects of the trade deficit on specific industries at those later hearings. The October 31 hearing will focus on steel and agriculture, and the November 12 hearing will focus on the telecommunications and electronics components and the automobile industries.

I believe that we must obtain as much knowledge as possible and have a feel for this very important issue, which is important because we are talking about jobs. There is a lot of political importance placed upon it just by the massive amount of legislation that has been introduced, and there will be a lot of time consumed not only in these hearings but on the floor, not just this year, but next year and probably in the number of years ahead of us.

I think it is important that this subcommittee, in particular, which has the jurisdiction on the employment aspects, see how these trade policies are going to affect employment. Certain trade policies and certain pieces of legislation, though they may have a positive effect in some States, are going to have a negative effect overall on employment, and beyond employment, you look to the impact on the consumer.

This is an issue that this committee will begin to explore as objectively and as systematically as possible. Beginning with Bill Brock, who has a very unique background as former Trade Ambassador and now Secretary of Labor, and the three economists, this should be a very good starting point.

[The prepared statements of Senators Quayle, Hatch, and Grassley follow:]

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STATEMENT OF SENATOR DAN QUAYLE ON THE IMPACT OF TRADE ON DOMESTIC EMPLOYMENT

SENATE SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY

October 22, 1985

10:00 A.M., 430 Dirksen SOB

Today, the Subcommittee on Employment and Productivity will be examining the impact of international trade on domestic employment.

Only too often these days we hear of industries adversely affected by foreign imports coming into our country, competing with our products, and unfortunately, in some cases, putting those industries out of business. This influx of foreign trade has been blamed for the loss of thousands, sometimes millions, of jobs in our country.

The immediate reaction of many people to the loss of employment or to the threatened loss of employment in certain industries has been to call for trade restrictions, barriers, and quotas. This protectionist wave has been sweeping the Congress over the past few wee s, and has resulted in the passage of a protectionist textile bill by the House, and the introduction of hundreds of other protectionist trade measures on both sides of the Hill.

However, people are beginning to realize that imports, while a factor in the decline of certain industries, are not the only reason for loss of jobs in those industries. The simplistic response of blaming foreign imports for the problems of industries such as steel, textiles, and telecommunications just is not holding water any longer. We are beginning to realize that the international monetary picture, the high value of the dollar, high interest rates fueled by the federal deficit, lack of modernization in some industries, and low labor costs in other nations are signficant contributors to our trade problems. It is increasingly clear that to lay the blame for unemployment in our country at the feet of imports an oversimplification and does not promote understanding of the other complex factors affecting our industrial base, nor does it promote the realistic resolution of our economy's problems.

Trying to solve our unemployment problems with trade restrictions is not necessarily the most effective way to address the serious problems in our economy. While some jobs would, of course, be saved, many other jobs could be lost or affected. For example, if the textile bill that has passed the House is signed into law, imports from East Asian countries would be restricted. If that occurs, it is likely that those East Asian countries will retaliate by closing their markets to our goods. For Indiana, that retaliation could mean that our farmers, who now export nearly 40% of everything they grow, would find the currently wide open East Asian agricultural markets shut tight.

Another scenario would occur with financially struggling Latin American nations. If we reduce the amount of textile products they can export, thereby reducing their market share and their income, they will have less money with which to purchase American goods. Again, for Indiana that could mean a reduction in the sales of cars, machinery and aircraft to those countries. Do either of these scenarios have a beneficial impact on our economy in the long run?

I stand for free trade, largely because of the net beneficial impact is has on the economy as a whole. But, I also demand fair trade. I do not support the dumping of products by other nations on our markets, nor will I support trade agreements that set up unfair restrictions on American goods going into foreign markets.

I believe the examples cited above give evidence to the difficulty of untangling the multitude of factors which affect employment and growth in our economy. I am holding this series of hearings in hopes of shedding some light on these difficult questions. I would also emphasize that it is important to understand better the complex relationship between trade and employment patterns so that our Committee can better assess future worker training and retraining needs.

The witnesses for our first hearing today will provide us with an overview of the current interrelationship between trade and unemployment in our country. I am hopeful that we can establish for the record just how many jobs have been lost due to imports, and how many have been lost as a result of other factors, such as the high value of the dollar, lack of modernization and change in certain industries, or low labor costs in other countries.

At our second and third hearings, scheduled for October 31st and November 12th respectively, we will be examining the affect of the trade deficit on specific industries. The October 31st hearing will focus on steel and agriculture. Being from the Midwest, I have seen first hand the results of the trade deficit on both those markets. Those industries also represent both sides of the trade issue: how to prevent imports from overtaking American markets, and how to keep markets abroad accessible and free for our agricultural goods.

Our November 12th hearing will focus on the telecommunications, electronic components, and automobile industries. Finally, depending on our schedule this year, we may possibly plan to hold further hearings to look at the appropriate responses to retraining workers in affected areas and to examine how well current federal adjustment assistance programs are working.

We are extremely fortunate to have such distinguished and learned witnesses for today's hearing. Our first witness is the Secretary of Labor, William E. Brock, who has also served as the United States Trade Representative from 1981 to 1985. Secretary Brock brings a unique perspective to these hearings, and is one of a handful of individuals who has experience in both trade and employment.

Following the Secretary of Labor, we will have a panel of experts, consisting of Dr. Murray Weidenbaum, with the Center for the Study of American Business at Washington University in St. Louis; Dr. Herbert Stein, Senior Fellow at the American Enterprise Institute; and Dr. Christopher Caton, Director of Long-Term Studies at Data Resources, Inc.

Again, let me say how pleased I am to have such expert witnesses before the Subcommittee on Employment and Productivity. We will begin with the U.S. Secretary of Labor, Bill Brock. I look forward to your testimony.

STATEMENT OF SENATOR HATCH

I WANT TO COMMEND SENATOR QUAYLE, THE DISTINGUISHED CHAIRMAN OF OUR EMPLOYMENT AND PRODUCTIVITY SUBCOMMITTEE FOR EMBARKING ON THIS SERIES OF HEARINGS ON THE RELATIONSHIP OF TRADE TO EMPLOYMENT. CLEARLY, THIS IS A "HOT" ISSUE IN THE POLITICAL SENSE, AND THUS ONE THAT DEMANDS CAREFUL EVALUATION. WE MUST GET THE FACTS OUT ON THE TABLE, AND THE HEARINGS PROPOSED BY SENATOR QUAYLE WILL CERTAINLY HELP US DO THAT.

IT IS UNDERSTANDABLE THAT THOSE OF US WHO HAVE INDUSTRIES IN OUR STATES SEVERELY AFFECTED BY IMPORTS ARE WONT TO BE PROTECTIVE OF THEM, AND ARE ESPECIALLY SYMPATHETIC TO THE PLIGHT OF OUR CITIZENS WHO HAVE BEEN LOYAL EMPLOYEES OF THESE COMPANIES. OUR DESIRE TO BE RESPONSIVE TO THE PROBLEM OF IMPORTS, HOWEVER, SHOULD NOT BLIND US TO THE NEGATIVE RAMIFICATIONS OF PROTECTIONIST TRADE POLICIES.

AS OUR WITNESSES TODAY WILL POINT OUT IN THEIR PREPARED STATEMENTS, THERE IS MUCH MISUNDERSTANDING ABOUT THE IMPACT OF IMPORTS ON EMPLOYMENT. THE BLEAK PROJECTION OF MASSIVE AND PERMANENT UNEMPLOYMENT DUE TO TRADE DEFICITS IS NOT TRUE. SUCH A PROJECTION IGNORES THE OFFSETTING POSITIVE EMPLOYMENT EFFECTS OF INCREASED DEMAND FOR PRODUCTS.

THERE IS NO DOUBT THAT WE MUST BE PREPARED WITH PROGRAMS SUCH AS TITLE III OF THE JOB TRAINING PARTNERSHIP ACT TO ASSIST WORKERS AFFECTED ADVERSELY. UTAH, FOR EXAMPLE, HAS USED JTPA FUNDS TO ESTABLISH A RESOURCE CENTER AND RETRAINING PROGRAMS FOR WORKERS LAID OFF FROM UTAH'S COPPER AND STEEL COMPANIES. THESE INDUSTRIES HAVE BEEN MAJOR EMPLOYERS IN UTAH AND REPRESENT TWO INDUSTRIES WHICH HAVE BEEN VERY SEVERELY AFFECTED BY IMPORT COMPETITION.

THESE HEARINGS SHOULD GIVE US A MUCH BETTER IDEA OF WHAT, IF ANY, FURTHER FEDERAL ACTION IS NECESSARY OR PRUDENT. I THANK MY COLLEAGUE FROM INDIANA FOR HIS INITIATIVE IN HOLDING THESE HEARINGS AND FOR BRINGING US THE DISTINGUISHED GROUP OF EXPERTS HERE THIS MORNING.

Chuck Grassley

Statement of Senator Charles Grassley at a hearing of the Subcommittee on Employment and Productivity on the impact of trade on employment and productivity. October 22, 1985.

MR. CHAIRMAN, I WOULD LIKE TO COMPLIMENT YOU FOR HOLDING THIS SERIES OF HEARINGS ON THE IMPACT OF TRADE ON EMPLOYMENT AND PRODUCTIVITY.

THIS YEAR THE U.S. WILL IMPORT AN ESTIMATED $150 BILLION MORE IN GOODS AND SERVICES THAN IT EXPORTS, A GAP NEARLY FOUR TIMES GREATER THAN IT WAS IN 1981. JUST BETWEEN APRIL AND JUNE OF THIS YEAR, THIS NATION IMPORTED $31.8 BILLION MORE THAN IT EXPORTED.

MR. CHAIRMAN, I BELIEVE THAT THE U.S. TRADE DEFICIT DOES HAVE SERIOUS CONSEQUENCES FOR EMPLOYMENT AND PRODUCTIVITY IN THIS COUNTRY. ACCORDING TO THE NATIONAL ASSOCIATION OF MANUFACTURERS, THE SOARING TRADE DEFICIT HAS CUT ECONOMIC GROWTH IN HALF IN THE LAST YEAR. NAM CLAIMS THAT ECONOMIC EXPANSION IS MUCH LOWER THAN IT WOULD BE IF THE U.S. SHARE OF DOMESTIC AND EXPORT MARKETS WERE THE SAME AS IT WAS EVEN A FEW YEARS AGO. THE COMMERCE DEPARTMENT HAS ESTIMATED THAT FOREIGN GOODS HAVE COST THREE MILLION JOBS THIS YEAR.

MR. CHAIRMAN, ~~IN GENERAL~~ I BELIEVE THAT COMPETITION BETWEEN PRODUCERS OF GOODS AND SERVICES IS A GOOD THING IN THE DOMESTIC AND INTERNATIONAL MARKETPLACES. UNFORTUNATELY, THE HIGH DOLLAR AND GOVERNMENT-ERECTED BARRIERS TO FREE COMPETITION HAVE DISTORTED THE INTERNATIONAL MARKETPLACE.

THE PRIMARY CULPRIT IS A "SUPER" DOLLAR, MADE STRONG BY EXCESSIVE BUDGET DEFICITS, WHICH CONSTRAIN MONETARY POLICY AND HOLD INTEREST RATES HIGH. THE HIGH COST OF THE DOLLAR HAS HAD TWO ADVERSE IMPACTS. FIRST, IT HAS INCREASED THE PRICE OF U.S. GOODS ON FOREIGN MARKETS, THUS MAKING COMPETITION MORE DIFFICULT FOR U.S. PRODUCERS. THE SECOND EFFECT OF THE HIGH DOLLAR IS TO ENCOURAGE AMERICANS TO BUY LARGER AMOUNTS OF LESS EXPENSIVE FOREIGN GOODS. ECONOMISTS BELIEVE THAT AS MUCH AS HALF OF THIS YEAR'S TRADE DEFICIT WILL BE CAUSED BY THE OVERVALUED DOLLAR.

THE SECOND PART OF THE PROBLEM IS BARRIERS TO FREE TRADE THAT HAVE MADE COMPETITION MORE DIFFICULT FOR U.S. GOODS. ACCORDING TO THE DUNKEL COMMISSION IN ITS REPORT TO THE GENERAL AGREEMENT ON TARIFFS AND TRADE DIRECTOR GENERAL IN MARCH OF 1985, THE TRADING RULES SET UNDER THE GATT ARE INCREASINGLY IGNORED OR EVADED.

MR. CHAIRMAN, THE INTERNATIONAL COMMERCIAL PRACTICES OF EVERY NATION VIOLATE THE PRINCIPLE OF FREE TRADE. THE ONLY VARIATION IN THOSE TRICKS OF THE TRADE IS ONE OF DEGREE. THE INCREASED ROLE OF GOVERNMENTS IN AFFECTING TRADE PATTERNS IS SO WIDESPREAD AND COMMONPLACE THAT IT CONSTITUTES A MAJOR STRUCTURAL PROBLEM WITHIN THE INTERNATIONAL ECONOMIC SYSTEM.

THE SOLUTIONS TO THE TRADE PROBLEM MIGHT BE COMPLICATED, BUT TWO THINGS WOULD HELP IMMENSELY. FIRST, CONGRESS AND THE EXECUTIVE MUST GET OUR FISCAL HOUSE IN ORDER; WE SIMPLY CANNOT TOLERATE OR AFFORD TODAY'S DEFICIT IN THE FEDERAL BUDGET.

SECOND, AMERICA MUST DEMONSTRATE ITS INTOLERANCE OF VIOLATIONS OF EXISTING TRADE LAWS, WHILE ALSO MOVING TOWARD IMPROVED ACCESS TO FOREIGN MARKETS THROUGH DIRECT NEGOTIATIONS WITH U.S. TRADING PARTNERS. THE UNITED STATES SHOULD ALSO FOSTER THE CREATION OF IMPROVED LEGAL REMEDIES TO COUNTER UNFAIR OR INJURIOUS TRADE PRACTICES.

IN ADDITION, MR. CHAIRMAN, I THINK WE NEED TO BE SENSITIVE TO THE NEEDS AND CONCERNS OF WORKERS WHO HAVE FELT THE IMPACT OF THE TRADE DEFICIT. FOR EXAMPLE, I HAVE COSPONSORED LEGISLATION TO PROVIDE AN IMPORT DUTY OF ONE PERCENT ON IMPORTED GOODS, THE FUNDS FROM WHICH WOULD BE EARMARKED TO HELP RETRAIN WORKERS DISPLACED BY FOREIGN COMPETITION.

I ALSO APPLAUD THE EFFORTS BEING MADE TO RETRAIN DISPLACED WORKERS NOW UNDER TITLE III OF THE JOB TRAINING PARTNERSHIP ACT. I AM CONCERNED, HOWEVER, THAT THE LABOR/HHS APPROPRIATIONS BILL WE HAVE BEEN CONSIDERING YESTERDAY AND TODAY CONTAINS A RATHER SUBSTANTIAL REDUCTION OF $122.5 MILLION FOR TITLE III. I UNDERSTAND THAT IT IS EXPECTED CURRENT SERVICES CAN BE MAINTAINED BY THE STATES BY USING CARRYOVER FUNDS. I HOPE THIS IS THE CASE, AND SINCE THE SECRETARY OF LABOR IS HERE TODAY, I WOULD LIKE TO TAKE THIS OPPORTUNITY TO CALL HIS ATTENTION TO THE REPORT THAT ACCOMPANIES THE LABOR/HHS APPROPRIATION, ~~THAT~~ WHICH CALLS FOR HIM TO MONITOR THE SITUATION, AND TO USE DISCRETIONARY MONEY TO ADDRESS UNFORSEEN SHORTFALLS. I WOULD LIKE TO ENCOURAGE THE SECRETARY TO TAKE THAT RESPONSIBILITY SERIOUSLY, AS I AM SURE HE WILL.

MR. CHAIRMAN, THIS CONCLUDES MY OPENING STATEMENT.

Senator QUAYLE. Before I welcome Secretary Brock, I will ask Senator Simon, the ranking member on this subcommittee, if he has any general comments before we begin the hearing.

Senator SIMON. Thank you, Mr. Chairman.

First of all, I would like to commend you for having the hearings. I do have a statement I would like to enter into the record, but let me just take a couple of minutes and say that I think this is an area of extreme importance. We do not need to convince the Secretary of Labor of that, both because of his present position and because of his former position as America's Trade Representive.

It seems to me there are three fundamental issues involved in the employment and international trade question. No. 1 is our own deficit where we, in fact, are shooting ourselves in the foot, causing an overvalued dollar. I hope we can get a handle on that aspect of the problem. The second is, a cultural phenomenon. We are the only nation on the face of the Earth where you can go through grade school, high school, college, get a Ph.D., and never have a year of a foreign language. We have failed to learn a very simple lesson: If you want to buy, you can buy in any language. If you want to sell, you had better speak the language of your customer. We have not paid attention to that very fundamental thing. And the third is, this whole area of what kind of trade laws and regulations we need to improve our Nation economically, put America back to work, and redress the imbalance in our international trade. And I assume that will be the bulk of what we are discussing in these hearings. Here, I think we have to be more realistic. I do not want to see it move over here to the Smoot-Hawley days, but I think a more balanced approach is needed.

Our trade regulations, it seems to me, basically grow out of the post World War II era, where we were the economic giant and the rest of the world was very poor, and we were generous, as we should have been. And I still want to be generous, to Bangladesh, to Mauritania, to the developing nations. But that is not where our problems come from today.

I called a friend at the White House after the President announced earlier this year that there would not be a quota on Japanese cars, and I asked, "What did we get out of it?" I expected some kind of concrete answer, and he responded, "Good will."

Now, I am all for good will, but my banker is not much impressed by good will. The fellow I buy groceries from is not much impressed by good will. I think we have to be tougher.

And I am pleased to see you in this position, Mr. Secretary, and my friend Clayton Yeider, over in your former spot. I think maybe the combination is going to move trade a little more to the front burner. Now, I am not faulting this administration, because this has been true in every administration. Trade has been kind of a back burner concern. We can kind of just drift along, and assume things are going to work out. I really think that approach has to be seen as a thing of the past. Let me give you one other illustration.

I was in Peoria recently. Keystone Steel and Wire in Peoria make nails. Nails go into Canada. Canada charges 50 cents per hundredweight. Nails come from Canada into the United States. We charge them 5 cents per hundredweight. I am basically a free trader. I would like to get rid of the tariff on both sides. But I think if it is 5 cents on one side, it has got to be 5 cents on the other; if it is 50 cents on one side, it has got to be 50 cents on the other.

The day of easy concessions where there is not reciprocity, I think that kind of trade policy or philosophy will have to become a day of the past, at least for the developed nations—for Canada, for Japan, for West Germany, for Sweden and so forth. I believe we cannot live on fear. We are going to have to live in the real world, the same real world that our friends are in. And I think if we do that, as well as move clearly on the deficit situation and our cultural situation, I think we can improve the climate.

Thank you, Mr. Chairman.

[The prepared statement of Senator Simon follows:]

OPENING STATEMENT OF SENATOR PAUL SIMON
SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY
OCTOBER 22, 1985

I WANT TO COMMEND MY DISTINGUISHED FRIEND AND COLLEAGUE FROM INDIANA FOR CONVENING THESE HEARINGS ON THE IMPACT OF TRADE AND THE TRADE DEFICIT ON EMPLOYMENT. THESE HEARINGS, WHICH WILL BRING TOGETHER THE VIEWS OF THE REAGAN ADMINISTRATION, BUSINESS, LABOR UNIONS AND ACADEMIC EXPERTS, WILL PROVIDE A MUCH NEEDED OVERVIEW OF THE EFFECT OF FOREIGN COMPETITION ON EMPLOYMENT OPPORTUNITIES IN CRITICAL AMERICAN INDUSTRIES SUCH AS STEEL, AUTOMOBILES, AGRICULTURE AND GENERAL MANUFACTURING.

AS THE CHAIRMAN HAS INDICATED, THERE ARE NO EASY SOLUTIONS HERE. THE RECENT GROWTH IN EMPLOYMENT OPPORTUNITIES IN THE SERVICE INDUSTRIES AND AMONG THE SELF-EMPLOYED DOES MASK THE CONTINUING PROBLEM OF HIGH UNEMPLOYMENT IN SUCH STATES AS ILLINOIS AND INDIANA.

THIRTY-FIVE STATES AND THE DISTRICT OF COLUMBIA HAVE FAILED TO RECOUP ALL OF THE FACTORY JOBS LOST DURING THE TWO MOST RECENT RECESSIONS -- A LOST THAT AMOUNTS TO 8 MILLION JOBS SINCE 1979. SIX STATES HAVE LOST MORE THAN 500,000 JOBS EACH SINCE THE 1980 RECESSION. ILLINOIS HAS LOST AN INCREDIBLE 1.3 MILLION JOBS, FOLLOWED BY PENNSYLVANIA WHICH LOST 1.1 MILLION; OHIO, 1.1 MILLION; MICHIGAN, 962,000; NEW YORK, 676,000; AND INDIANA WHICH LOST 517,000.

CLEARLY, THE HIGH VALUE OF THE DOLLAR AND ITS IMPACT ON OUR ABILITY TO SELL AMERICAN PRODUCTS ABROAD HAVE HURT MANY OF THE INDUSTRIES THAT MADE THE MIDWEST THE MANUFACTURING CAPITAL OF THE WORLD. WHAT EXACTLY DOES THE OVERVALUED DOLLAR MEAN TO FOREIGN TRADE? IT MEANS THAT WHEN WE EXPORT, THERE IS A 40 PER CENT TAX ON EVERYTHING WE EXPORT. THAT MAKES FOR PRETTY TOUGH COMPETITION. THAT'S THE MAIN REASON THAT SHOES FROM MATTOON, IL., EQUIPMENT MADE BY CATERPILLAR IN PEORIA, FARMERS FROM WATSEKA SELLING SOYBEANS, AND UNEMPLOYED STEEL WORKERS FROM THE SOUTH SIDE OF CHICAGO AND GARY, INDIANA ARE ALL IN THE SAME BOAT TODAY -- WE'RE ALL HURTING!

EMPLOYMENT IN MANUFACTURING WOULD HAVE BEEN 1.5 MILLION PERSONS HIGHER, IF THE DOLLAR HAD REMAINED AT THE SAME LEVEL AS IN 1980. ANOTHER 600,000 JOBS WERE LOST INDIRECTLY, ACCORDING TO ROBERT BRINNER OF DATA RESOURCES, INC., AS A RESULT OF THE ELIMINATION OF THESE FACTORY JOBS.

I AM HOPEFUL THAT THESE HEARINGS WILL PROVIDE AN OPPORTUNITY FOR THE MEMBERS OF THE COMMITTEE TO FOCUS THEIR ATTENTION ON THE MOST IMPORTANT ISSUE WE FACE IN AMERICA -- PUTTING OUR PEOPLE BACK TO WORK. THERE ARE TWO KINDS OF PEOPLE IN THIS COUNTRY -- THOSE WITH HOPE AND THOSE WHO HAVE NO HOPE. A PERSON WHO CANNOT EARN A LIVING WAGE AND PAY HIS OR HER OWN WAY IN SOCIETY WILL SOON LOSE HOPE.

LATER ON IN THE CURRENT SESSION OF CONGRESS, I WILL BE INTRODUCING A MAJOR NEW JOBS BILL, WHICH WILL BE DESIGNED TO REMOVE AMERICANS FROM THE WELFARE AND UNEMPLOYMENT COMPENSATION ROLES AND TO COUNT THEM AMONG AMERICA'S WAGE EARNERS AND TAX PAYERS.

I COMMEND THE CHAIRMAN FOR HOLDING THESE HEARINGS AND FOR HIS LEADERSHIP IN THE AREAS OF JOB TRAINING AND FULL EMPLOYMENT.

Senator **Quayle**. Thank you, Senator Simon.

Now it is a real pleasure to welcome back to this committee Bill Brock, who has been a real champion of the working people in trying to put together a very effective Department of Labor in a short period of time. I think we have all been impressed with your work over in the Department of Labor and also appreciate your expertise as a former Trade Ambassador.

So with no further accolades, welcome back, Mr. Secretary and proceed at your will.

STATEMENT OF HON. WILLIAM E. BROCK III, SECRETARY OF LABOR, U.S. DEPARTMENT OF LABOR, WASHINGTON, DC

Secretary **Brock**. Thank you, Mr. Chairman.

I have prepared an eloquent, articulate, thoughtful paper which I would like to submit for the record.

Senator **Quayle**. And it will appear in the record as thoughtful, articulate and eloquent.

Secretary **Brock**. Thank you.

Let me speak from the heart a little bit on this subject. First, I do not think either one of you have said anything that I do not agree with and agree with very strongly. I appreciate the comments you have made, and I also appreciate the leadership that the two of you have shown in bringing this issue to the front burner.

If I have a plea, it is that this country put trade on the front burner. And I think, Senator Simon, that you are absolutely right. We simply have not done it, and we have not done it for 200 years. It was just easier to sell in Dubuque or Des Moines than it was in Osaka or Madrid. And we are not going to live in that kind of world anymore, ever again.

Now, I think international trade is the greatest thing that has ever happened to this country. It is making us look at ourselves honestly and face up to some inadequacies and some weaknesses. And that is good, not bad. There is nothing wrong with good, healthy competition. But there is something wrong with good, healthy competition when we do not think at all about policies in the context of that competition.

It is really irrational to hear the Congress talking about tax reform without their putting it into the context of whether or not it enhances or reduces our ability to compete internationally. Every major issue on regulatory policy, tax policy, expenditure policy in the Congress and in the executive should be conducted within the context of this Nation's ability to compete internationally. And we should evaluate regulations or tax changes in terms of whether or not they enhance our productive capacity or diminish it. It does not mean we will not do it, but we should at least think about it in that framework.

I wanted to mention also, parenthetically, and picking up on what you said, Senator Simon, about Canada and the disparate tariffs on nails. Rather than addressing the question of individual tariffs—and there are probably sufficient good reasons for previous negotiators to have done whatever they did, and I will not critique them—but I think one of the most exciting things that has happened in my political life is that Canada and the United States now may be prepared to enter into a free trade relationship. I think the country did a fundamentally important thing when we signed an agreement with the State of Israel last year. I said at that time that I hoped it was precedential, that it was something that we would pursue with other countries.

But I really believe most of us in this country are essentially free traders and believe that this country can compete on the basis of free and fair trade. And now that Canada has indicated a willingness to enter into that discussion, I hope that you in the Congress and we in the administration will welcome that opportunity and pursue it aggressively.

I was frankly a little surprised at how quiet the response was when Canada made that announcement, as I think it was a major breakthrough. I mention this just because I think it is so fundamentally important that we show by example, if nothing else, that we do believe in free trade, and that we are willing to pursue it with any country that wants to play by the rules. And if they want to eliminate all barriers, we will. And in so doing, we will markedly enhance our competitive ability and the creation of jobs on both sides of the border.

Let me begin in looking at trade by stating what I think is the obvious, but it needs to be stated at the outset, that if we are going to discuss trade, we have to look at ourselves honestly. And an honest look at the United States will tell us some pretty nice things. There is no economic measurement that I have seen in my previous position or in my present one that does not indicate that the United States is the most productive nation on the face of the Earth. We are more productive as a people than Japan or Korea or Taiwan or France or Great Britain or anybody else. And you have to know that when you start talking about trade, because we tend to focus on the negative areas. We tend to focus on an area where we have gotten out of competitive whack, like steel, or maybe automobiles, or some other particularly besieged industry.

The fact is, in terms of the sum total of the economic activity of the United States across the whole span of all that we do, we are by yards the most productive people on the face of this Earth. We are in the middle of the strongest recovery from a recession this country has experienced in over 50 years. We have been creating almost 300,000 jobs a month. We have the rate of inflation back down to the lowest level since 1964 on the producer price index, and that was a cancer that was eating at our productive efforts. Poverty is declining; unemployment is declining; productivity is up substantially. In the second quarter of this year, manufacturing goods productivity increased 7½ percent. That is a spectacular improvement in productivity. And it says that we are doing a pretty nice job of getting our economic house in order at the level of individual companies.

It is also true that not all segments of the American workplace have shared equally in this recovery. There are six major manufacturing sectors that have continued to lose jobs even during the recovery. It is part their fault, part ours. But they have not shared in the recovery.

On the positive side, if you look at U.S. employment, one out of every eight jobs in this country is now dependent upon exports.

Many others are dependent upon the imports that we receive and complain so much about.

If we are going to continue to improve in terms of job creation, growth, and in terms of our international competitive circumstance, I think we have to take a number of very specific steps. Senator Simon mentioned the one that I think is far and away the most important in the short term, and that is dealing with the deficit. There really is no alternative to that. You cannot consume 80 percent of the net savings of the American people each year to finance the Federal Government's deficit and expect to leave enough money for research and development, new plants, new equipment, new technology, improvements in productivity, and the ability to compete. It will not happen.

And while I welcome and acknowledge and appreciate the decline in the prime from 21½ percent to 9½ percent, very few of us pay prime in this country. Most of us pay consumer credit rates. The credit card rate is still over 18 percent with most companies in this country, and that is what most of us pay. And 18 percent interest rates are prohibitive in anybody's language. They drain off our ability to buy. And you are not going to get a reduction in consumer rates of credit, mortgage credit, consumption credit, much less an overall reduction in interest rates, until we have reduced the Federal deficit and made a multiyear commitment to that effort.

Secondly, I would add to my own remarks what you said, Senator Simon, that we need to look at—I think you called it the cultural problem—the fact that we do not think internationally, and the fact that we do not teach language skills or other international skills. It is not just language. But it is true, and you put it in an apt way, you buy in any language, but you sell in the language of the purchaser. That is absolutely true, and we do not teach that. We have not done a very good job.

In terms of maintaining and improving our competitive circumstance, we have to continue to emphasize productivity. That goes back to the rate of savings in this country. The rate of savings in the last 2 or 3 weeks is the lowest that it has been in my lifetime. The last number I saw was something like 2 percent. That is insane. That is our seed corn that we are putting aside to plant for next year's crop, and there is no human way we can continue to grow in this country without a rate of savings in excess of 2 percent; it cannot be done. That has to change.

In terms of trade per se, I do think that what the President has proposed is a major and fundamentally important step, because he has suggested the need and the commitment to implement an aggressive, tough pursuit of free and fair trade. The two can only be coupled together.

We have also announced a coordinated program with the other members of the G-5 to see if we can improve the performance of the International Monetary System and deal with the dollar problem, or put more specifically, the inadequate value of certain other currencies such as the yen.

It is awfully important, not just in terms of attitude, but in terms of performance, that we understand that we are part of an international competitive environment, and that implies a substantial reduction in the adversarial relationship which has characterized labor and management relations in the last few decades. I do not believe we can compete with the world if we spend all our time kicking each other on the shins. I think the fact that labor and management are coming to that conclusion independently of us is a remarkably healthy sign. And they are doing it so much more actively than they are in certain European countries.

But we do, in government and the private sector, have to encourage and facilitate labor-management cooperation to a degree which exceeds anything we have done in the past.

Senator Quayle, you mentioned displaced and dislocated workers. If we are going to maintain essentially a nonprotectionist position, we have to understand that there are human costs involved and that it is not just a human problem. It is a national problem when a steel worker who has 45 years of life under his belt and maybe 20 or 25 years of active experience as a highly skilled steel worker loses his job—whether it is due to technology or import competition does not matter. His is a skill that cannot be applied in that plant anymore, and we have a national asset that we are going to lose unless we do a better job of providing that individual with an alternative occupation that can hopefully use those skills. And if we cannot do that, then we should give him additional skills that he can apply to be productive as a human being. That, in my judgment, requires further improvements in title III of JTPA; it requires a serious look at whether or not the present TAA Program is effective, and if it is not, how we can modify it to make it more so. But it, in sum, requires that we as a government improve the quality and the comprehensiveness of our commitment to dislocated workers in this country who constitute enormous national resources that we can ill afford to lose.

Let me conclude with one point about what I think the chairman mentioned at the outset, about the climate for protectionism, about the 300-odd bills that have been put before the Congress. I hope I am right, Mr. Chairman, in sensing that a little bit of steam has gone out of the rampant protectionist mood that I sensed up here a couple of months ago. I may be wrong, but I hope there is a little less support for just out-and-out protectionism in the Congress.

I do not know why that would be the case, other than that people maybe are beginning to have second thoughts about how disastrous such a policy would be. But I hope they are having those second thoughts.

It seems to me that before we embark on anything as outrageously stupid as pure protectionism, we ought to look not just to our history books and Smoot-Hawley, but to the current example of the European Economic Community, which has engaged in really substantial protectionism for the last 15 or 20 years. Now, they have redefined protectionism. They have developed a sophistication that is almost unique in the world, in terms of how they protect. They protect not just by barriers; they protect by subsidies. In Europe, it costs $600 a ton to grow sugar. And the world price of sugar, conservatively, is no more than $70 or $80 a ton. And they are now the world's largest sugar exporter. And there is enough subsidy in that to get your attention. Ninety percent of their sales dollar is in the form of a subsidy from government. Not only is that unfair trade to our sugar producers and others in the Philippines and Brazil and the Caribbean, it is dumb economics.

Now, before we embark on anything like that, let us look at what they do, and let us analyze whether or not it has worked, because in the last 15 years, the United States has created almost 30 million jobs. Despite unpopular wars and political scandals and energy crises and inflation and recession and everything else, we have created almost 30 million jobs in this country in 15 years, and in Europe, they have created none—none—with all of their protection and all of their government intervention in the market economies of those countries.

So let us take a few moments in this current debate and look at what others do and see why it does not work, and be very sure before we follow a similar course.

I thank you for the chance to be with you this morning.

[The prepared statement of Secretary Brock follows:]

STATEMENT OF
WILLIAM E. BROCK
SECRETARY OF LABOR
BEFORE THE
SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY
SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES

October 22, 1985

Mr. Chairman and Members of the Subcommittee:

I am pleased to have this opportunity to appear before you today at this first in a series of hearings on the impact of international trade on domestic employment. I want to commend the Subcommittee for holding these hearings and for the important role that Members of the Labor and Human Resources Committee have played in promoting the strong employment and real income growth our nation has enjoyed over the past 34 months, while at the same time assisting those workers who have not yet shared fully in the economic recovery.

The question before the Subcommittee today--the relationships between changes in international trading patterns and trends in U.S. employment and productivity--is indeed complex. Let me begin by putting the issue into perspective.

Since the beginning of the recovery in November 1982 we have experienced the best post-recession growth since World War II, with the creation of 9.4 million jobs. Private nonagricultural employment has risen by over 1.7 million since the beginning of this year. The proportion of the population at work today, at 60.6 percent, is at about its all time peak which was reached earlier this year. Presently 93 percent of the nation's workforce have jobs.

It is equally clear that we have not yet solved all of our employment problems. For several reasons, not all segments of the labor force have shared equally in the job gains. Manufacturing employment has increased by 1.2 million during the recovery, employment in many manufacturing industries is stagnant or declining in part due to the rapid increase in our trade deficit. Six manufacturing sectors have continued to lose jobs even during the current recovery. These include three sectors where imports have increased rapidly--textiles, steel, and leather products. Job losses have also occurred in tobacco, chemicals, and petroleum and coal products. Moreover, since January, jobs in manufacturing have decreased by 340,000, with about half of the loss occurring in machinery and electrical equipment manufacturing. Nonetheless, six manufacturing industries currently have employment levels above their pre-recession July 1981 level: lumber, furniture, electrical equipment (despite the drop since January), transportation equipment, printing, and rubber and plastics. Manufacturing has regained 53 percent of the jobs lost during the 1981-82 recession.

Since the service-producting sector of our economy accounts for three-fourths of non-agricultural employment, it is not surprising that most of the recent job growth in our economy has occurred in the service-producing industries. The service-producing sector contains a diverse group of industries, including wholesale and retail trade, finance, insurance and real estate, miscellaneous services (e.g., business, education and medical services) and government. Contrary to what some critics claim, most of these new jobs are not in hamburger stands paying the minimum wage. The fastest employment growth has occurred in business services. Average hourly earnings in this industry are about $8.25 per hour, compared to about $9.50 per hour for manufacturing. Two other industries among the top ten in job creation, special trade contractors and miscellaneous services, average $12.75 and $11.50 per hour, respectively, substantially higher than the average manufacturing wage.

The Trade Deficit and International Competitiveness

The extent to which international trade affects the national economy has increased significantly over the past several decades. The ratio of U.S. trade (exports and imports combined) to GNP rose from 8.6% in 1970 to about 15% in 1984. Similarly, the ratio of imports to domestically produced goods increased from 14.4% in 1970 to 31% in 1984. Current estimates indicate that about one out of eight U.S. jobs depends directly or indirectly on U.S. exports. About 32% of U.S. agricultural production was exported in 1984. Thus, domestic economic activity affects and is strongly affected by international trade. Our economy is linked closely with the rest of the world. International trade flows have a major impact on U.S. workers and industries.

Mr. Chairman, our bulging international trade deficit concerns us. The U.S. merchandise trade deficit reached a record high of $123 billion in 1984 (imports valued on cost insurance and freight basis), surpassing the previous record of $69 billion set in 1983. Many analysts expect the merchandise trade deficit to increase to about $150 billion this year. The deterioration in our trade balance has been concentrated in the manufacturing sector as exports have not kept pace with the rise of imports. As recently as 1981, we recorded a positive trade balance in manufactured goods. By 1982, however, we had incurred a deficit of $10.5 billion; the deficit rose over three-fold in 1983 to $38.2 billion and more than doubled again to reach $88.7 billion in 1984. Trade in non-high technology items accounts for most of the manufacturers trade deficit. However, the traditional U.S. surplus in high technology goods has also begun to decline recently.

The industries bearing the brunt of the import surge also have suffered the most significant dislocation of workers. Between 1979 and 1984, employment declined by 396,000 workers in the primary metals industry and by 254,000 workers in metal fabricating. Eight out of ten industries recording the highest decreases in employment were in the manufacturing sector.

Even in agriculture, one of our traditional strengths, our trade performance has been lackluster. The surplus in the U.S. agricultural trade balance has fallen from $25 billion in 1981 to $16.7 billion in 1984.

A variety of factors have contributed to the deterioration of the U.S. trade position. The contribution of each factor to the trade deficit, however, cannot be measured with precision. The major factors include the more vigorous economic growth in the U.S. relative to our trading partners, which has stimulated U.S. demand for foreign goods and services while foreign demand for our products has remained flat; the very strong, and until recently, rising values of the dollar, which has lowered import prices and increased export prices; and the high debt levels of certain developing countries which have led them to curtail purchases of U.S. goods and to expand exports to the U.S. In addition, barriers abroad to our exports and unfair trading practices of other nations have tended to reduce our exports and increase our imports.

In the last few weeks, this Administration has taken important steps which will contribute to reducing our trade deficit. In mid-September, the President announced a Trade Policy Action Plan which stresses our commitment to free and fair trade. As part of the plan, the President has announced his intention to vigorously pursue U.S. rights and interests in international commerce under both U.S. law and the GATT, to ensure that other countries live up to their obligations and trade agreements with the U.S.

Some cynics claim that these steps are merely window dressing and will not have any impact on our trade deficit because the root of the deficit is that our products are not internationally competitive. They argue that the quality of our products is poor and our workers get paid too much. I disagree strongly with that view. While there is a role for some wage restraint, and while the private sector is working to improve product quality today, the U.S. worker is overall the most productive in the world. To be sure, the price competitiveness of some of our products has suffered in the last few years, particularly during the time period when the value of the dollar has been very high, but I think a great deal of progress is being made to correct this problem.

Long run national competitiveness has many determinants. These include rates of savings and investment, spending on research and development, relative levels and growth rates of productivity, and the cost of labor, capital, and other factors of production. All of these influence the cost of traded goods and trade flows. Among these factors, productivity growth is one of the most critical. Increases in productivity, by reducing the cost of production, enable firms to price their goods lower on world markets. On the other hand, a rise in the cost of labor, capital, natural resources, or other factors will tend to increase costs of production.

Mr. Chairman, I know you and your Subcommittee take a keen interest in the issue of productivity. I would like to emphasize again that in terms of absolute productivity levels the U.S. has overall the most productive economy and the most productive workers in the world (although some other countries, especially Japan, have achieved higher rates of overall productivity growth). I would also like to draw your attention to some BLS data which show that productivity in the manufacturing sector increased significantly in 1983 and 1984 after a number of years of stagnation or decline. This was associated with a general recovery in the economy and should help make U.S. products more competitive in world markets. Overall productive efficiency in manufacturing advanced by 5.2 percent in 1984, making it the biggest advance in eight years. This is based on the BLS multifactor productivity data which measure output per unit of combined labor and capital inputs. The figure for 1983 was 4.7 percent. This overall manufacturing productivity gain was accompanied by a decrease in U.S. unit labor costs in manufacturing of 0.8 percent in 1983 and virtually no change in 1984. Previously, unit labor costs had increased by over 3 percent every year since 1974. Unit labor costs are a good indicator of relative competitiveness since they are a substantial component of production costs and because they reflect both changes in productivity and changes in labor compensation. Unit labor costs essentially measure the labor cost of producing a unit of output. Of course, many other factors, such as the quality of goods and the value of the dollar, have an impact on competitiveness.

In one study the Bureau of Labor Statistics constructed various measures of productivity and labor costs for the U.S. and nine other industrial countries. Some trends emerge from these figures. In terms of national currency, Japan and Germany have had better success than the U.S. in controlling unit labor costs; the U.S. did better than the other seven countries studied. Over the last decade unit labor costs declined on average in the U.S. relative to a trade-weighted index of unit labor costs in the other nine countries; Japan and Germany achieved larger declines in this measure than did the U.S. The other countries studied (Canada, Denmark, France, Italy, Norway, Sweden, United Kingdom) each incurred an increase in their unit costs relative to their competitors. In 1984, unit labor costs essentially remained unchanged in the U.S., declined in Canada, Japan and Germany, and rose in the other countries. Unfortunately because of the high value of the dollar in 1984, unit labor costs in U.S. dollar terms declined in the other industrialized countries while they remained unchanged in the U.S.

Labor-Management cooperation is an important factor which affects productivity. Our ability to compete in world markets suffers when confrontation rather than cooperation becomes the preferred approach to labor-management relations. Fortunately, the trend now seems to be going in the other direction. Companies with cooperative labor policies are showing their competitive strength through increased productivity and products that are both of better quality and lower priced.

Is America Becoming Deindustrialized?

Mr. Chairman, in the announcement for these hearings you asked whether imports are leading to the deindustrialization or the loss of the United States' industrial base. The basic answer is no. Changes in the number and kinds of jobs result from many factors, including the growth of technology, changes in consumer demand, the stage of the business cycle, the level of savings and investment, changes in productivity, and changes in trade patterns. Economists have difficulty in separating out the precise contribution of each factor.

As you are aware, one study by the Federal Reserve Bank of Boston found that changes in employment are not correlated with changes in the degree of net import competition in recent years. We also have to remember that imports provide jobs in certain sectors such as the transportation and retail industry. Some imports, such as raw materials, do not compete directly with U.S. production.

Nevertheless, the loss of productive capacity and employment in some sectors (e.g., steel, autos, textiles) is in part due to rising imports. Workers in these sectors face some adjustment problems. While manufacturing's share of total employment has fallen in recent decades, this is not evidence that we are losing our industrial base. This is shown by the fact that manufacturing's share of gross product originating in the private sector has declined by only one percentage point since 1959.

Since World II, the share of total employment in goods producing has declined gradually and persistently. However, this trend reflects the growth of productivity in goods-producing industries, not a decline in the production of goods. This trend also reflects a long-term secular shift toward greater employment in the service-producing sector. Despite these trends, projections by the Bureau of Labor Statistics estimate only a slight decline over the next decade in the share of total employment accounted for by manufacturing production.

While the impact of trade on the level of employment is difficult to determine, there is evidence that trade patterns affect the demand for various types of labor skills. Research performed at the Department of Labor indicates that persons working in export industries tend to have higher skill levels and higher wages in comparison with the rest of the labor force. On the other hand, workers in import-competing industries tend to be less skilled, have less education, are older, and earn lower wages than the rest of the work force (steel and autos are the major exceptions to the findings on wages and skills). Thus, workers in some import-competing industries may have a harder time than others in finding a new job if they become displaced.

Where do we go from here?

Mr. Chairman, I have tried to outline some of the factors bearing on the issues before this Committee. I realize that in many respects I may have raised more questions than I have answered and you may rightly ask, where do we go from here?

I believe that the President, in his recent trade policy statement and action plan which was announced on September 23, set the tone and direction. Among the specific actions, the President directed the United States Trade Representative to initiate or accelerate several unfair trade cases and proposed the creation of a fund to match subsidized export credits by other nations. The U.S. will also pursue a new round of trade negotiations aimed at reducing barriers to trade and improving the international trading system. These policies will help create more jobs for U.S. workers in export-related industries.

In addition to the President's Action Plan, the Ministers of Finance and Central Bank Governors of France, the Federal Republic of Germany, Japan, the United Kingdom and the United

States met recently and agreed to undertake coordinated actions to reduce the value of the dollar to a more reasonable level which will further help to make U.S. products more price competitive.

The issue of jobs for American workers was a major focus for the President's announcement. The President also made it clear that protectionism will not increase the number of jobs in the U.S. economy. To quote from the President's September 23 speech on international trade issues:

> "There are some, well-meaning in motive, who have proposed bills and programs that are purely protectionist in nature. These proposals would raise the costs of the goods and services that American consumers across the land would have to pay. They would invite retaliation by our trading partners abroad, would in turn lose jobs for those American workers in industries that would be the victims of such retaliation, would rekindle inflation, would strain international relations, and would impair the stability of the international financial, and trading systems. The net result of these counter-productive proposals would not be to protect consumers or workers or farmers or businesses. In fact, just the reverse would happen. We would lose markets, we would lose jobs and we would lose our prosperity."

The President while emphasizing the benefits of free and fair trade, and noting the general level of economic well being this nation is currently enjoying, went on to say firmly,

> "But I am not unmindful that within this prosperity some industries and workers face difficulties. To the workers who have been displaced by industrial shifts within our society we are committed to help."

For example, the President has directed directed me "to explore ways of assisting workers who lose jobs to find gainful employment in other industries." He has also asked me to chair a Cabinet Working Group on Adjustment which is charged with examining how existing programs can be made more responsive to dislocated workers and examining policy options for longer term structural changes.

Assistance is currently available to all unemployed workers, including those who have lost their jobs due to imports and technological change, under two programs administered by the Department of Labor's Employment and Training Administration. First, the unemployment insurance system provides unemployed workers with wage loss replacement--up to 26 weeks of compensation under the regular UI program and up to 13 additional weeks of compensation in States where the Extended Benefits Program is operating. Second, the Employment Service System provides job search referral and placement assistance to all unemployed workers without charge.

In addition, there are two programs specifically targeted to displaced workers: The Dislocated Worker Program authorized by Title III of the Job Training Partnership Act (JTPA), and the Trade Adjustment Assistance Program.

While Federal job training funds have been available for the economically disadvantaged for more than two decades, the Title III Dislocated Workers program has been in place only two years. Operated by the States, it offers retraining, relocation and placement and other supportive services to workers displaced by trade, technology, natural disasters, shifts in consumer preferences or other factors. We estimate that in the last program year which ended in June of this year, some 180,000 dislocated workers received services under the program with the latest figures showing a job placement rate of 70 percent. This is a promising record for a program still in its infancy.

The President in making his decision not to provide import relief for the copper, steel or footwear industries, directed the Department of Labor to develop special plans to assist dislocated workers in these industries in their search for new employment. As a result, we have set aside discretionary funds from Title III of the Job Training Partnership Act to help workers in these distressed industries. Earlier this year 10 million dollars was made available for projects in the steel industry in 19 states, and another 5 million dollars for projects in the copper industry in 12 states. Most recently, 5 million dollars was set aside for workers in the nonrubber footwear industry.

In addition to these federally funded training programs, the Labor Department is helping to facilitate improved productivity and improved cooperation between labor and management. This of course is primarily the responsibility of the private sector. There are a multiplicity of ways that employers and workers can--and are--increasing the value of U.S. labor's contribution to the production process. Acting in concert, they have initiated a number of arrangements for enlisting the talents and energies of both parties in a commercial quest to make their business more productive and more competitive. Jobs and production systems can be designed and managed in ways that employ the full skills and capabilities of the U.S. labor force. New kinds of organizations have been created, and new sets of organizational rules agreed upon that replace rigidity with the flexibility that enables firms to adapt more readily and less painfully. The Department is doing its best to encourage this process.

Mr. Chairman, you and the Members of the Subcommittee are aware of my serious concern about the effect of plant closings--whether caused by import penetration or otherwise--on both employees and communities. The members of the Task Force on Economic Adjustment and Worker Dislocation, whom I announced this last Friday, will examine the causes and effects of worker dislocations and evaluate what is being done here and in other nations to deal with this problem. The Task Force is expected to complete its work by December 1986 and will report its findings directly to me.

Let me quickly note that while there are compelling reasons for restraint in wage and benefit levels so that they do not outstrip our increases in productivity, it is unthinkable that an improvement in our competitive position should be paid for by reducing the standard of living now enjoyed by U.S. workers and their families. Instead, our focus as public policy makers should be on increasing the standard of living now experienced in other countries of the world. The Department's activities in the International Labor Organization and our work in the foreign assistance area, both point in this direction.

The role of public policy makers is to develop a mix of trade and economic policies which enhance, rather than inhibit, the ability of our products to compete internationally. We want to promote the growth of free, competitive markets and to promote adjustment, rather than block it through restrictions or other governmental measures. This will enhance the ability of U.S. firms to compete in world markets. Other countries (e.g., in Europe) which have relied more heavily on government intervention have not been successful in creating jobs. Until the recent turnaround, employment growth in most European countries had not increased in over a decade, which stands in sharp contrast to the close to 20 million new jobs produced in the U.S.

The private sector has the main role in promoting employment, but the government can do a few things. Measures including, reducing the budget deficit, improving U.S. trade policy, facilitating improved labor-management cooperation, and assisting dislocated workers will all help promote U.S. employment and make the U.S. more competitive. There is still a lot of work to be done on these issues. These hearings can be very helpful to our effort to develop sound policies and programs to meet the needs of this country for productive and competitive workers able to withstand the increasing challenge of international trade.

Mr. Chairman, this concludes my prepared statement. I would be pleased to answer any questions you or the members of the Subcommittee may have.

Senator QUAYLE. Thank you very much, Mr. Secretary. As usual and as anticipated, you have given us a very thorough review and viewpoint of our trade policies and perhaps where we might be able to make some improvement.

Let me ask sort of a microquestion first. You said on this transition of our people who are economically dislocated that you are going to have to work more with title III, and then you also said that you are going to try to make the trade adjust assistance more effective. I am wondering, just looking at that from a programmatic point of view and as the Secretary of Labor, if it would not be helpful to get more coordination and consolidation between those two programs.

It seems to me that they are identical. We have got a situation on the reconciliation bill that will be coming up. It will be a separate program for training—I am not talking about the unemployment compensation of it, but I am talking just about the training aspects.

Wouldn't it make more sense and a more efficient operation from a structural organizational point of view if you had the coordination and maybe even the consolidation of the title III of JTPA and the trade adjustment assistance?

Secretary BROCK. I think so. Frankly, if I can be so presumptuous, I would like to suggest that we would be better off if neither of these were in the reconciliation bill and if we could sit down in a quiet session and see if we can develop a program jointly between us that would deal more effectively with this problem than we are dealing with it today.

But what worries me is that the process is moving so fast. By putting all this on the reconciliation bill, Congress is freezing it into a multiyear commitment on some legislation, particularly on TAA, that does not seem to work very well.

Senator QUAYLE. I might be so presumptuous as well, and just take you up on that suggestion and maybe try to get the principal players together even before we finalize reconciliation and see what can be done. I think for the good of both programs, it would be helpful if we might be able to sit down and explore how we can better coordinate this.

Secretary BROCK. We would love to do it.

Senator QUAYLE. In a bigger sense, you indicated that we ought to move trade to, as Senator Simon referred to, the front burner, and you went through some of your key points and said that the best thing we can do to help the trade situation is to cut the Federal deficit. I concur with that, and I think there is no doubt it that there is a direct linkage. You talked about the enhancement of management and labor, how our Tax Code really ought to focus on productivity. You talked about looking at the social aspect with the dislocated worker provisions and trying to ease that transition, which I think is of great importance.

I wonder if, as we move trade to the front burner, there ought to be other things we should to focus on. I have a two-part question. One, do you think that there are some structural changes that we need to make within the political system we have today for determining what is an unfair trade practice, what is a subsidy, what is dumping, and then, when we find that, to really have a fairly solid way that we can respond to it.

It seems in the past—and it is not just this Administration—that the philosophy of free trade is changing. We say, OK, you really should not erect barriers or quotas—you used the example of sugar. Not only should we not do it, but it is dumb economics, and if they want to do something dumb, then go ahead and let them do it. But on the other hand, our response to that is the fact that we now have a sugar program, and we have got quotas that we have erected, and so there is this kind of in-house response, but not on a very formal basis.

I guess what I am groping with is are there some structural changes that need to be made in our trade laws that would give the President more power, give him some more authority to deal with these things? Or do you feel that the situation from your past experience, and now as Secretary of Labor, looking at the employment aspects, is that things are probably OK and that we just need to focus on some of these other things like the deficit and labor-management and economic dislocation?

Secretary BROCK. Mr. Chairman, the President has all the authority he can say grace over. It really is not a matter of structure or authority. In a couple of areas, we take too long to resolve some of these issues. In a couple of cases, you have to go through two and three tiers of bureaucratic decisionmaking, and you might reduce the timeframe. In some areas, it costs too much for the private sector to file cases, and we in government, I think, ought to be willing to shoulder more of that burden by self-initiating some of these cases. The President committed himself to do precisely that in his trade package, and I sit on the Cabinet Council that meets now almost weekly looking at cases where we can self-initiative complaint actions.

But in all honesty, I have not seen any bill introduced in Congress that would increase the President's authority; the bills I have seen would reduce it. The bills I have seen would take 301 authority and give it entirely to USTR.

Well, now, let us be honest with each other. Do you really think that I, or Clayton Yeutter, or somebody else who happens to be in the President's Cabinet—Bob Strauss, if he were there—do you think we would engage in a major 301 action against Japan or France without the consent of the President of the United States? Why does Congress want to give that authority to the USTR and not to the President? It is not going to change anything. It will put the USTR at greater jeopardy, I will tell you that, and they had better consult with the President if they want to stay in that job. It does not make any sense; it really will not change anything.

The authority you have given the President is almost unlimited, it really is. Under 301, we can do anything, we really can. The question is, Is it the right thing to do. And that is where we have always run up against the problem. We have decided in a lot of cases that the country pays more than we get for some of these actions, and therefore we should not undertake them.

Senator **QUAYLE**. I think you are right in your assessment of the locomotive rushing to some sort of trade legislation, particularly the legislation that has been introduced, has been slowed down. But I think that there is still probably the political support to pass quite a few of these bills, but—not the support to override a veto.

Do you think that the administration and the work you are doing on your Cabinet Council, will come forth with any so-called trade initiatives? Are you basically going to just keep the pattern as you have in the past, focus on the deficit, focus on some of the other things that you have, or do you think that we might see the administration forthcoming and saying, OK, trade has got to be on the front burner, we have got to do all these other things that we have mentioned, but here are some additional things that we might be willing to consider as well?

Secretary **BROCK**. Most of the program is in place. Most of the program was incorporated in the President's announcement. A couple of items are yet to be addressed in terms of the specifics. I mean, the President made a commitment to adjustment. We have yet to be specific in telling you and your colleagues precisely what that means in coming up with a program. That is why I say I think it would be worthwhile to try to sit down and work one up together. We would express that willingness to do so.

In terms of other major actions, the only thing I can think of that has some potential for immediacy is the possibility of the Canadian Free Trade Zone discussion, and that is not inconsequential. These are the two largest trading partners in the world. We do over 120 billion dollars' worth of business with each other, and the possibility exists for the creation of hundreds of thousands, if not millions, of jobs on both sides of the border with that kind of an action.

But in terms of fundamental trade policy, I do not anticipate any dramatic new initiatives.

Senator **Quayle**. I have one final question, and then I will yield to Senator Simon. Does your Department have any statistics on how some of these specific bills will affect the employment in this country? For example, do you have any data that would show that if the textile bill that passed the House of Representatives is enacted, what it would do to overall employment, not just employment in the textile industry, but overall employment. And I guess I would ask the same thing about the shoe legislation, or the natural resources legislation. These are specific proposals—at least, the textile issue—that we are going to have to deal with one way or another. I just wonder from an employment point of view if you have any data that will show that this will, in fact, save jobs, a net savings of jobs, or will it cost jobs—do you have any kind of analysis in that area?

Secretary **Brock**. I have seen some analysis of that sort, Mr. Chairman, but in all candor, I am reluctant to put anything like that out over my name because I do not trust these projections. You can do anything with numbers. And I think we do a little bit too much of that. So while I have seen some statements that the textile bill for example, would cost up to 10 jobs for every job saved, I do not know. I do not think there is any question but what you lose more jobs than you gain. There is no question about that. I think you can demonstrate that with substantial effectiveness. But to be precise in terms of the multiplier, I personally am reluctant.

You are going to have some of the most distinguished economists this country has in the next panel. Herb Stein and Murray Weidenbaum are two men that I have known and worked with and have enormous respect for, and I would trust their answers a lot more than my own.

But in the textile bill context, the one statement that I thought was really fundamentally important was not so much in terms of jobs lost by that bill, but the effect on poor people in this country. If it is true that that bill would increase the bill for textile products on the average of $600 per family, that means a whole lot of poor families are just not going to buy clothes in this country, and I do not see how in good conscience we can pass legislation that would do that.

Senator **Quayle**. Thank you, Mr. Secretary.

Senator Simon?

Senator **Simon**. Thank you, Mr. Chairman.

Mr. Secretary, you mentioned United States-Canadian relations, and Prime Minister Mulroney's excellent statement. A week ago Monday, I was supposed to speak to the Canadian Club in Toronto, but because the Senate was in session on that day, working on some of our problems, I had to cancel. But I am going to take the liberty of inserting in the record a talk I was supposed to give to the Canadian Club there on United States-Canadian trade relations.

[The prepared statement of Senator Simon on United States-Canadian trade relations follows:]

U.S. CANADIAN TRADE RELATIONS

BY

Sen. Paul Simon, of Illinois

I AM HONORED TO BE INVITED TO PARTICIPATE IN THIS U.S. - CANADIAN EXCHANGE LECTURE SERIES. AND I REGRET THAT THE IMPORTANT VOTE CALLING FOR AN EXTENSION OF THE U.S. DEBT LIMIT PREVENTS MY BEING THERE PERSONALLY WITH YOU.

I HAVE BEEN TO TORONTO ON AT LEAST TWO OCCASIONS THROUGH THE YEARS AND IN CANADA MANY TIMES, FROM NOVA SCOTIA TO A FAMILY TRIP UP THE ALASKA HIGHWAY IN THE YUKON TERRITORY WHEN IT WAS STILL 1200 MILES OF GRAVEL ROAD.

IT IS NOT ONLY THE UNPARALLELLED PEACEFUL BORDER BETWEEN OUR TWO COUNTRIES THAT TELLS OF THE GOOD RELATIONS BETWEEN OUR TWO COUNTRIES. IN YESTERDAY'S NEW YORK TIMES COLUMNIST JAMES RESTON DESCRIBED CANADIANS AS "OUR BEST AND CLOSEST FRIENDS." I KNOW OF NO ONE IN A LEADERSHIP POSITION IN THE UNITED STATES WHO HAS ANY DIFFERING VIEW. RECENTLY I WAS AT A MEETING WHERE FOREIGN STUDENTS WERE ASKED TO IDENTIFY THEMSELVES. WHEN AMONG THEM WERE TWO FROM CANADA, THE MODERATOR SAID, "NOT CANADIAN STUDENTS. JUST FOREIGN STUDENTS." THERE IS A TWO-EDGED MESSAGE THERE. IT IS IMPORTANT THAT WE MAINTAIN CLOSE TIES SO THAT WE DO NOT VIEW EACH OTHER AS FOREIGN. BUT IT IS ALSO

IMPORTANT THAT WE NOT TAKE EACH OTHER FOR GRANTED. WHERE PROBLEMS ARISE, LET US WORK TOGETHER FOR THEIR SOLUTION.

SOMETIMES FOOLISH THINGS IMPAIR OUR GOOD RELATIONSHIP, LIKE OUR DENYING ENTRANCE INTO THE UNITED STATES OF FARLEY MOWAT, THE AUTHOR OF NEVER CRY WOLF, BECAUSE SOME YEARS AGO HE OBJECTED TO B-52'S FLYING OVER HIS TIMBERED LAND. FREE COUNTRIES LIKE THE UNITED STATES AND CANADA NOT ONLY CAN TOLERATE DIVERSITY OF VIEWPOINTS, WE THRIVE ON THEM. WE ONLY EMBARASS OURSELVES WHEN WE IMITATE THOSE WHO ATTEMPT TO SUPPRESS OPPOSING OR DIFFERING VIEWPOINTS. ONE OF THE WAYS EACH OF US CAN ENRICH THE OTHER IS THROUGH EXCHANGES OF IDEAS, IN THE ARTS, AND IN SO MANY OTHER WAYS THAT ENRICH THE CULTURE IN BOTH OUR COUNTRIES.

IN MANY FIELDS--EDUCATION AND DEFENSE ARE GOOD EXAMPLES--THERE IS A STRONG, EFFECTIVE, MUTUALLY-ENRICHING RELATIONSHIP BETWEEN OUR TWO COUNTRIES. OVER THE YEARS OUR TWO COUNTRIES HAVE SHARED A HOST OF EXPERIENCES. CANADA PLAYS A VITAL ROLE IN REINFORCING NATO'S NORTHERN FLANK. ON THE NORTH AMERICAN CONTINENT, CANADA'S PARTICIPATION IN THE NORTH AMERICAN AEROSPACE DEFENSE COMMAND AND THE INSTALLATION OF THE NEW NORTH WARNING SYSTEM WHICH REPLACES THE OLD DEW-LINE IS CRUCIAL. THE 39 STATIONS IN ALASKA AND CANADA, WITH COSTS SHARED BY EACH NATION, WILL SET UP A STRING OF ADVANCED PHASED-ARRAY RADAR UNITS FOR TRACKING INCOMING BOMBERS AND CRUISE MISSILES.

BUT THERE REMAIN PROBLEMS ON WHICH BOTH OF OUR NATIONS MUST WORK. LET ME BRIEFLY DISCUSS TWO. BOTH OF WHICH HAVE A SIGNIFICANT IMPACT ON MY HOME STATE OF ILLINOIS.

ACID RAIN IS A SOURCE OF TROUBLE BUT PROBABLY NOT MAJOR CONTROVERSY IN CANADA. IN THE UNITED STATES IT IS ALSO A SOURCE OF TROUBLE, AND IN MY COAL-PRODUCING STATE A MATTER OF CONTROVERSY.

WHILE I FAVOR ADDITIONAL RESEARCH, THE CALL FOR RESEARCH SHOULD NOT BE A SUBSTITUTE FOR ACTION. THE REALITY IS THAT THE HIGH SMOKESTACKS WE HAVE BUILT PROTECT THE IMMEDIATE ENVIRONMENT BUT ENDANGER THE MORE DISTANT ENVIRONMENT. WE HAVE TO FACE OUR PROBLEMS, AND DO IT IN A WAY THAT SAFEGUARDS THE COAL INDUSTRY OF THE MIDWEST AT THE SAME TIME IT PROTECTS OUR AIR AND OUR LAKES MORE EFFECTIVELY. IT CAN BE DONE, BUT IT WILL NOT BE ACCOMPLISHED BY PRETENDING A PROBLEM DOES NOT EXIST.

THERE IS AN ANALOGY IN TRADE, ALSO IMPORTANT TO MY STATE AND NATION. WE SHOULD NOT PRETEND THAT PROBLEMS DO NOT EXIST; THEY DO. AND THE SOONER WE FACE THEM IN A REALISTIC WAY BOTH CANADA AND THE UNITED STATES WILL BENEFIT.

BY POLITICAL PHILOSOPHY I AM A FREE TRADER, BUT YOU SHOULD BE AWARE THAT PROTECTIONIST SENTIMENT IS RISING IN THE UNITED STATES, PARTICULARLY IN AREAS OF HIGH UNEMPLOYMENT LIKE ILLINOIS. DURING THE MONTH OF AUGUST I CONDUCTED 57 TOWN MEETINGS IN MY STATE AT WHICH CITIZENS COULD ASK QUESTIONS

ABOUT ANYTHING. WITHOUT EXCEPTION, THERE WERE QUESTIONS OR DEMANDS THAT WE DO SOMETHING ABOUT THE LOSS OF JOBS DUE TO IMPORTS. THE QUESTIONS AND DEMANDS WERE OFTEN SIMPLISTIC, BUT THERE IS NO QUESTION ABOUT THE SENTIMENT. PROTECTIONIST SENTIMENT IS SO THICK YOU CAN CUT IT. THERE IS SOME DANGER THAT IF WE DO NOT FIND SENSIBLE ANSWERS, ACTION WILL BE TAKEN THAT WILL DO HARM TO THE UNITED STATES AND TO CANADA AS WELL AS TO OTHER NATIONS.

THAT IS WHY I WELCOME THE HOUSE OF COMMONS STATEMENT OF PRIME MINISTER BRIAN MULRONEY. HE CALLS FOR NEGOTIATIONS ON THIS COMPLEX ISSUE, AN ISSUE THAT U.S. ADMINISTRATIONS HISTORICALLY HAVE VIEWED AS A MATTER OF SECONDARY IMPORTANCE. YOUR PRIME MINISTER SAID, "TODAY MORE THAN EVER, OUR PROSPERITY AND THAT OF OUR PARTNERS DEPEND ON AN EXPANDING WORLD TRADE AND A GROWING WORLD ECONOMY." THAT REALISTIC ASSESSMENT I HOPE WILL CAUSE MUCH CLOSE SCRUTINY TO THE TRADE ISSUE BY THE UNITED STATES.

OUR TRADE DEFICIT IN 1984 WAS $123 BILLION AND WILL BE CLOSE TO $150 BILLION IN 1985. OUR TRADE DEFICIT WITH CANADA WAS CLOSE TO $20 BILLION LAST YEAR. A MAJOR PART OF THE U.S. PROBLEM IS SELF-INFLICTED, BY OUR FAILURE TO COME TO GRIPS WITH OUR BUDGET DEFICIT, CAUSING AN OVERVALUED DOLLAR, WHICH IN TURN CAUSES EXCESSIVE IMPORTS AND A REDUCTION IN EXPORTS.

BUT LET ME BE CANDID. GETTING OUR FISCAL HOUSE IN ORDER WILL HELP, BUT THE UNITED STATES IS GOING TO HAVE TO BECOME A

TOUGHER NEGOTIATOR. AFTER THE PRESIDENT ANNOUNCED THAT THE UNITED STATES WOULD NOT ASK FOR A QUOTA ON JAPANESE CARS, BECOMING THE ONLY MAJOR AUTOMOBILE MARKET IN THE WORLD WITHOUT A QUOTA ON JAPANESE CARS, I CALLED A FRIEND IN THE WHITE HOUSE AND ASKED WHAT WE GOT IN RETURN. HE REPLIED, "GOOD WILL."

I LIKE GOOD WILL, BUT INCREASINGLY AUTOMOBILE WORKERS AND BUSINESS LEADERS AND FARMERS ARE FINDING THAT ANSWER UNSATISFACTORY. THEIR BANKERS DO NOT CREDIT THEIR ACCOUNTS WITH GOOD WILL. IT DOES NOT FEED A FAMILY OR PAY FOR COLLEGE TUITION OR FUEL A CAR. AND ULTIMATELY THAT KIND OF GOOD WILL DOES NOT SECURE FIRM FRIENDSHIPS.

EIGHTY PERCENT OF CANADA'S EXPORTS TO THE UNITED STATES COME TO US DUTY-FREE, WHILE ONLY 65 PERCENT OF OUR SALES ENTER YOUR COUNTRY WITH THAT STATUS. NAILS ARE MADE IN PEORIA, STERLING AND ROCK FALLS IN MY STATE AND ENTER CANADA WITH A 50 CENTS PER HUNDREDWEIGHT TARIFF. NAILS FROM CANADA COME TO US AT 5 CENTS PER HUNDREDWEIGHT. STEEL TUBING COMES INTO YOUR COUNTRY WITH A TARIFF 22 TIMES HIGHER THAN THE CHARGE WE MAKE. R.R. DONNELLY IN MY STATE PRINTS CATALOGS. CATALOGS SHIPPED INTO CANADA HAVE A HEAVY DUTY. BUT A U.S. FIRM CAN CONTRACT WITH A CANADIAN FIRM FOR CATALOGS AND OTHER PRINTING AND BRING THEM INTO THE UNITED STATES WITHOUT A DUTY BEING IMPOSED. ADVERTISING AND PRINTING FACE NOT ONLY TARIFF BARRIERS, BUT POSTAL AND INCOME TAX BARRIERS. PHARMACEUTICAL FIRMS IN MY STATE COMPLAIN OF UNFAIR BARRIERS.

THERE ARE TOO MANY OTHER EXAMPLES. THE UNEMPLOYED IN MY STATE, THE BUSINESSES THAT ARE FAILING OR STRUGGLING FOR SURVIVAL IN AN INCREASING CRESCENDO ARE ASKING THOSE OF US IN CONGRESS TO DO SOMETHING.

AND DO SOMETHING WE WILL.

BUT WHETHER IT WILL BE RESPONSIBLE, SENSIBLE ACTION IS LESS CERTAIN. THE UNITED STATES AND CANADA ARE EACH OTHER'S MAJOR TRADING PARTNER. IT IS IMPORTANT TO BOTH NATIONS THAT WE ACT TO ENCOURAGE TRADE, NOT DISCOURAGE IT, BUT THE DAYS OF GENEROUS UNILATERAL CONCESSIONS BY THE UNITED STATES ARE COMING TO AN END.

ONE-FIFTH OF THE U.S. EXPORTS GO TO CANADA; THREE-FOURTHS OF YOUR EXPORTS COME TO THE UNITED STATES. THAT TRADE IS IMPORTANT TO BOTH OF US.

LET US ACCEPT THE SUGGESTION OF PRIME MINISTER MULRONEY THAT WE CREATE A NEW ERA OF IMPROVED TRADE BY TACKLING THE COMPLEX ISSUES, ELIMINATING THE MINOR IRRITANTS, AND CANDIDLY CONFRONTING THE MAJOR PROBLEMS SO THAT BOTH COUNTRIES CAN EXPERIENCE GROWTH. IT CAN BE DONE AND SHOULD BE DONE. PRESIDENT JOHN F. KENNEDY SPOKE OF OUR SPECIAL RELATIONSHIP:

> "GEOGRAPHY HAS MADE US NEIGHBORS. HISTORY HAS MADE US FRIENDS. ECONOMICS HAS MADE US PARTNERS. AND NECESSITY HAS MADE US ALLIES. THOSE WHOM NATURE HATH SO JOINED TOGETHER, LET NO MAN PUT ASUNDER. WHAT UNITES US IS FAR GREATER THAT WHAT DIVIDES US."

AND LET ME ADD A SPECIAL INVITATION. ST LOUIS BORDERS ILLINOIS AND IN THAT AREA OF MY STATE WE HAVE STRONG ST. LOUIS CARDINAL FANS. IF IN THE NEXT FEW DAYS TORONTO AND ST. LOUIS PREVAIL IN THE BASEBALL PLAYOFFS--AND SIMPLE JUSTICE REQUIRES THAT THEY DO--THEN I INVITE YOU TO ST. LOUIS TO THE FIRST GENUINE WORLD SERIES IN BASEBALL HISTORY. I HOPE TO SEE YOU THERE, AND IN YOUR FINE CITY OF TORONTO ON ANOTHER OCCASION.

Senator SIMON. Let me follow through on the questions of my colleague from Indiana. One of your predecessors told me that the Trade Representative is kind of out in left field, not a part of the inner circle, and when it gets down to it, the Trade Representative is enlisted to do a little bit; then, they call on the State Department, and the State Department has a lot more clout, and our relations with other countries politically tend to dominate the decisionmaking rather than the economic factors.

No. 1, is that accurate, and No. 2, if that is accurate, what can we do to balance things a little more?

Secretary BROCK. Senator, it may have been accurate in earlier administrations. I do not think it has been accurate in this one. It certainly was not in my experience.

It is almost conventional wisdom in this country that the State Department dominates trade policy. I did not find that to be true. Maybe it is because I have such affection and respect for George Shultz, but it was a very rare occasion when I made a recommendation as USTR that it was not supported by the State Department. If there was opposition, it usually came from other quarters.

But let me remind you that the Congress passed a law which, if adhered to, will ensure that trade will achieve its appropriate role in the Cabinet. The Congress created a law which set up the trade policy process. In that, the Chairman of the Trade Policy Committee is the U.S. Trade Representative, and sitting on that Committee are the Secretaries of State, Commerce, Agriculture, Labor, and five other agencies. And, as Chairman of that Committee, the U.S. Trade Representative can ensure that trade has an appropriate level of attention.

We have in this administration a Cabinet council type of approach, and in recent months, most of the trade decisions and discussions have taken place in the Economic Policy Council, chaired by the Secretary of the Treasury. But the trade policy process that was set up by that congressional action is in place, and it really is the process that allows you to keep these items properly focused.

So I really do not agree with the comment. It does in part depend on personality, but if the USTR is aggressive, cares about issues and wants to fight for them, he or she can be sure they are appropriately debated—he or she can.

Senator SIMON. Well, are we adequately staffed so that we can really analyze and address the issues you are talking about minutia out there, a million and one little things—the nails from Peoria, brooms from Denmark, fluorspar from southern Illinois—all kinds of things, in a very, very, complex field.

Do we have enough people—and I hate to even suggest more people in any governmental entity at this point, but do we have enough people do really do the job?

Secretary BROCK. I think so. But here, I am a little bit out of my territory, because USTR is set up as the policy arm and the negotiating arm, not the implementing arm, of Government. When you do an investigation of unfair trade practices, the preliminary investigation is generally done by the Department of Commerce. If there is a complaint filed, the investigation is done by the ITC, the International Trade Commission.

I think, at least in the experience I have had in the last 4 years, that they did have enough people. There were times, Senator, when so many issues got loaded on the platter at the same moment that it was difficult to achieve action as fast as many of us would have liked. And I was particularly concerned sometimes with the burden we were putting on the ITC, because we are asking them to do things that we were not before.

For example, in the steel bill, you in the Congress and we in the administration insisted that steel companies plow back their money into upgrading their competitive circumstances. I happen to think that was the right thing to do. But we put a burden on the ITC to oversee that they had not had before—asking them to evaluate firms in those fashions and I think we have to be very careful to be sure that they are constantly evaluated in terms of their capacity to perform at the desired level of service. I do not know today whether they can or not. I think they can. They did while I was there. It is hard to comment on what may be the case at the moment.

Senator **Simon**. I confess, I am not sure from time to time who has what jurisdiction in this policymaking and implementation.

Secretary **Brock**. You are part of a large crowd.

Senator **Simon**. All right. Let me ask just one final question. I recall when we were debating the textile bill, and we will be debating it again shortly. Our colleague, Senator Hollings, from South Carolina, said when a Japanese car comes into the United States, in 30 minutes, it is clear and ready for sale; when an American car goes into Japan, it takes 4 months to go through inspection. When an American car lands in France, it may take over a year to go through inspection.

Now, who takes a look at that kind of a problem? Is that the U.S. Trade Representative, or who is taking a look at it, and if I may be specific in that area, what are we doing to try and rectify that kind of an imbalance?

Secretary **Brock**. The U.S. Trade Representative does have that basic responsibility, because if the actions of the French or the Japanese Government are so burdensome as to constitute a trade barrier, that is the responsibility of the USTR to get rid of it. And we have negotiated at length with the Japanese about adopting practices where we accept their testing methodologies, and they accept ours. For instance, in the case of automobiles, we allow the manufacturers to sell certified that they have met the relevant Japanese import standards.

We have made a good deal of progress there, more with Japan than with France, in all honesty. But I am not quite sure where it is at the moment. It has been several months since I was directly involved. At that time, I frankly felt that we were at the point of just about achieving what we wanted, which was an equitable type of testing at both borders with automobiles. We have not achieved that equitability, as far as I know, unless it has happened very recently, in cosmetics.

We have pressed the Japanese maybe harder on this subject than any other, because the Japanese do not have tariff barriers in most areas. The tariffs are as low, and in many cases lower than ours. Their barriers are bureaucratic. When we go through 6 or 7 years of testing under the FDA for a new product, they may require, after they have gone through the testing here, a complete retesting over there. The same thing is true of cosmetics.

What we have asked for is that those process standards, the certification procedures, be made equal on both sides of the Pacific. And we have that commitment. We will see whether or not they keep it on time, but they are moving in that direction. We got that commitment 2 years ago, and we have to just sit on them all the time to be sure that they stay with it. If they do, it will be a most significant trade action and I think, at least as far as I know, in most of those categories, we are pretty much moving on track with it. I hope that is still the case.

Senator **Simon**. Well, let me just add that I think it is important that we continue to move and that we are tough in these areas.

Secretary **Brock**. I agree.

Senator **Simon**. Again, I think in theory, free trade is the goal—not just in theory, but in practice. That is where we ought to be trying to go. But we have been playing on an uneven field in too many cases.

Secretary **Brock**. That is right.

Senator **Simon**. We need to rectify that.

Secretary **Brock**. I very much agree.

Senator **Simon**. Let me just add that I was at a dinner meeting last night where, among the people who were there was one of the top officers of the AFL-CIO and several economists, and everyone was in agreement that the naming of Bill Brock as Secretary of Labor was a great move for this country. So we are pleased to have you where you are.

Secretary **Brock**. I hope they had not had too much wine to make such a statement. [Laughter.]

I thank you for that very much.

Senator **Quayle**. Thank you, Mr. Secretary, very much for your time and your testimony and your hard work; thank you very much.

Secretary **Brock**. Thank you very much, Mr. Chairman.

Senator **Quayle**. Next, we have a panel with Dr. Weidenbau, Dr. Stein, and Dr. Caton.

Gentlemen, first on my list is Dr. Murray Weidenbaum, who is director of the Center for the Study of American Business at Washington University in the place where they play baseball these days—St. Louis. Welcome, Dr. Weidenbaum.

STATEMENT OF DR. MURRAY L. WEIDENBAUM, DIRECTOR, CENTER FOR THE STUDY OF AMERICAN BUSINESS, WASHINGTON UNIVERSITY, ST. LOUIS, MO; DR. HERBERT STEIN, SENIOR FELLOW, AMERICAN ENTERPRISE INSTITUTE, WASHINGTON, DC, AND DR. CHRISTOPHER N. CATON, DIRECTOR OF LONG-TERM STUDIES, DATA RESOURCES, INC., LEXINGTON, MA

Dr. **Weidenbaum**. Thank you, Mr. Chairman. It is good to be back, and I appreciate your reference to that important activity going on in St. Louis. And neighbor, Senator Simon, it is good to see you, too.

It is a great pleasure to participate in these important hearings, and I would like to summarize the statement I have prepared.

What are the facts on the inroads that imports are making into the American economy? The truth is less dramatic than the charges, and I cite four examples.

Myth No. 1, imports are supposedly dragging down the economy, depressing employment, especially in manufacturing. The truth is that the rapid rise in employment in the United States in recent years is the envy of the rest of the world. Total U.S. employment has increased from 98.8 million in 1978 to 107.2 million today.

We hear so much about the decline in manufacturing, but industrial production in the United States reached an all-time peak in 1984 and has remained on a high plateau since. Manufacturing's share of the GNP has held steady for 30 years.

The trend in manufacturing employment is not as good. The total number of manufacturing jobs has fluctuated in the vicinity of 19 million since 1970. That is not booming growth, but it is a far cry from the supposed decline and fall of manufacturing we hear so much about.

In fact, total employment of production workers in our country is rising. The point we overlook is that the fastest-growing opportunities for production workers are in services. Manufacturers are performing a smaller range of activities inhouse, and they are contracting out many activities to companies that are classified as being in the service sector.

Myth No. 2, imports are the main reason for unemployment in steel, textiles, and other key industries. The data do not support this contention. Generous wage increases in excess of the average wage gains by other factory workers has been the largest single reason for the lack of competitiveness of our steel industry, and thus for declining employment in the steel companies. Rapidly improving productivity is the main reason for declining employment in our textile industry.

Myth No. 3, protection is the way to save jobs. Protectionist actions increase the cost of producing goods and services, and they reduce the competitiveness of our products. For example, if the United States had imposed, as the industry requested, a 15-percent import quota on steel in 1984, that would have probably saved quite a few steelworker jobs—our estimate is 26,000—but the quota would have resulted in far more jobs being lost in the steel-using industries—our estimate is 93,000. Higher prices for protected steel make American automobile and durable goods producers less competitive.

If a steel quota had been implemented, the American consumer would have been saddled with a very high-cost jobs program that would have resulted in a net loss of jobs.

Protectionism turns out to be the most inefficient and regressive welfare program ever designed. If anyone were to identify a Government program where the benefits to recipients amounted to only one-half of the costs, we would criticize it as shamefully wasteful. But in the case of protectionism, the ratio is much worse than that. The typical increase in prices paid by American consumers far exceeds the total wages of the jobs "saved". The estimate for footwear was 9 to 1—$9 of cost for every $1 of benefits. For the recent automobile quota, it was $4 of cost for $1 of benefit.

Protectionism, of course, may be a politician's delight—other politicians not anyone in this room, of course—because it delivers visible benefits to the protected parties while imposing the cost as a hidden tax on the public. But those higher prices are paid by American consumers. And in many cases, like textiles and apparel, the burden hits the poorest people in our country most heavily.

Myth No. 4, workers in import-affected industries deserve to be treated more generously than other employees. I know of no reason why workers in industries facing serious international competition should be viewed as more meritorious than, say, defense workers who lose their jobs when Government contracts are canceled. After all, the line of causation from the Government's budget deficits to the high-priced dollar to rising imports to reduced employment is far more indirect than the link between the Government decision to close a military facility and the resultant economic hardship.

Programs to ease the burden on unemployed workers are a standard part of Government activity, and these general-purpose programs will of course continue. But the most effective way of dealing with the rising tide of imports is not to try to dam up foreign trade nor to create trade adjustment programs that in effect become entitlements that discriminate against other workers.

I would like to suggest five positive approaches—and I will just summarize them very quickly—to make American business more competitive, which I think is the fundamental challenge.

One. Reduce the budget deficit. The deficit has led to the high-priced dollar, that has made it so difficult for American companies to compete.

Two. Gear tax reform to enhance productivity and competitiveness. It turns out that the current modified flat tax proposals being considered by the Congress turn out to hit hardest those companies that have already been hardest hit by imports. This is not intentional; the persons drafting these tax changes have just not given enough thought about the impact on foreign trade.

Three. Renew the regulatory reform effort. That would be an excellent way of reducing the costs of producing goods and services in the United States. A lot was accomplished in the first year of the Reagan administration in this area and progress has slowed since.

Four. And this is a real sleeper—reduce U.S. barriers to U.S. exports. About half our trade deficit with Japan could be eliminated if Congress rescinded the bans on the export of timber and oil—self-inflicted wounds. Also, restraints on the export of strategic goods should be administered with common sense. It does not help national security to prevent American companies from selling items that are readily available from foreign competitors.

Five. American business and labor must face the challenge of increasing productivity. We cannot blame our poor production practices on foreigners. The answer is not to prop up industries with import restrictions or government subsidies, or to play King Canute and try to prevent businesses from closing or running away. Labor and management in each company need to face the challenge of enhancing their competitiveness, and it turns out that foreign competition is the most effective spur to greater productivity.

Thank you very much.

Senator QUAYLE. Thank you, Dr. Weidenbaum.

[The prepared statement of Dr. Weidenbaum follows:]

NOT FOR RELEASE BEFORE
9:30 A.M. EDST
OCTOBER 22, 1985

IMPORTS AND UNEMPLOYMENT: DISPELLING THE MYTHS

by Murray L. Weidenbaum, Director
Center for the Study of American Business
Washington University in St. Louis

Testimony prepared for the Subcommittee on Employment
and Productivity of the
Senate Committee on Labor and Human Resources
Washington, D.C., October 22, 1985

We hear so much about the inroads that imports are making in the American economy and their tremendous effect on employment. What is the evidence? The truth is far less dramatic than the overblown charges. Let me cite four key examples:

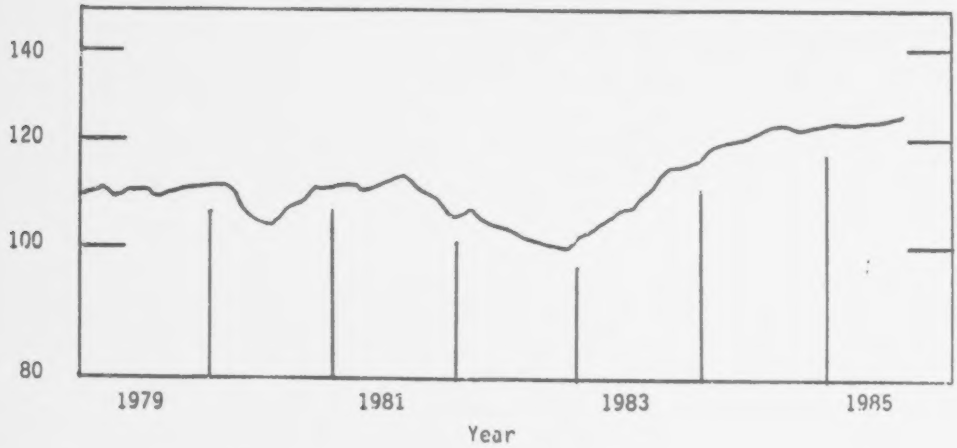
MYTH #1. **Imports are dragging down the American economy, depressing employment especially in manufacturing.** The truth of the matter is that the rapid rise in employment in the United States in recent years is the envy of the rest of the world. Total U.S. civilian employment has increased from 98.8 million in 1978 to 107.2 million today.

We hear so much about the decline in manufacturing. But industrial production in the United States reached an all-time peak in 1984 and has remained on a high plateau ever since. See Figure 1. Moreover, as shown in Figure 2, manufacturing's share of the real gross domestic product has held very steady for the last 30 years.

Note: The views expressed are entirely personal.

Figure 1

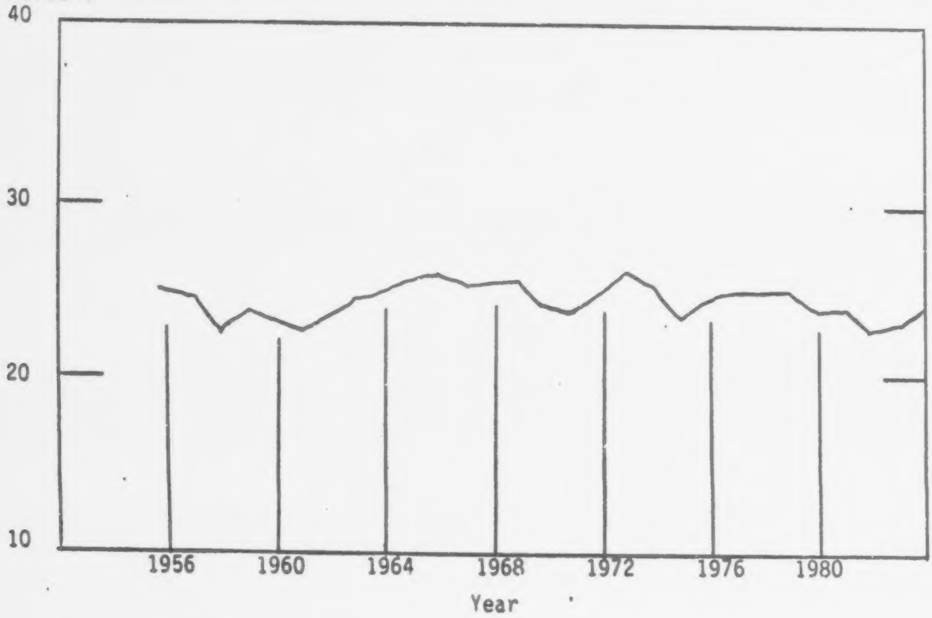
INDUSTRIAL PRODUCTION
Ratio Scale, 1977=100



Source: Federal Reserve System

Figure 2

MANUFACTURING'S SHARE OF REAL GROSS DOMESTIC PRODUCT



Source: Federal Reserve Bank of Cleveland

The trend in manufacturing employment, however, is not quite as sanguine. The total number of manufacturing jobs has fluctuated in the vicinity of 19 million since 1970. This is not exactly booming growth, but it is certainly a far cry from the alleged decline and fall of U.S. manufacturing that we hear so much about. In fact, my colleague at the Center for the Study of American Business, Professor Richard McKenzie, is doing research that shows that total employment of production workers in the U.S. is continuing to rise. The point overlooked by most analysts is that the fastest growing opportunities for production workers are occurring in the service industry. In large measure, this results from the trend toward less vertical integration among manufacturing firms. Manufacturers are performing a smaller range of activities in-house and contracting out other activities to subcontractors and suppliers, many of whom are classified as being in the service sector.

MYTH #2. **Imports are the main reason for unemployment in steel, textiles and other key industries.** The data do not support this contention. For example, a Federal Trade Commission study of the American steel industry shows that granting generous wage increases -- in excess of the average wage gains by other factory workers -- has been the largest single reason for the lack of competitiveness and, thus, declining employment in American steel companies. On-going research by Professor McKenzie indicates that rapidly improving productivity is the main reason for declining employment in the American textile industry. Unfortunately, it is very difficult to determine the extent to which the pace of automation has been accelerated by international competition in textiles.

MYTH #3. **Protection is the way to save jobs.** Protectionist actions increase the cost of producing goods and services in the United States, reducing the competitiveness of American products. A recent study by Professor Arthur Denzau at the Center for the Study of American Business shows that if the United States had imposed a 15 percent import quota on steel in 1984, as the steel industry sought, 26,000 steelworker jobs could have been saved -- but at the cost of 93,000 jobs in the steel-using industries. The higher prices for protected domestic steel make American automobile and durable goods producers less competitive at home and abroad. If the steel quota had been implemented, the American consumer would have been saddled with paying for a high-cost jobs program that would have resulted in a net loss of 67,000 jobs.

Moreover, protectionism turns out to be the most inefficient and regressive welfare program ever designed. If anyone were to identify a government program where the benefits delivered to the recipients amounted to only 50 or 60 percent of the costs, the public would criticize it as shamefully wasteful. But in the case of protectionism, the typical increase in prices to be paid by American consumers far exceeds the total wages of the jobs that are "saved." In the case of footwear quotas, the ratio of costs to benefits was 9 to 1; in the case of steel and autos, 4 to 1.

Protectionism, of course, may be a politician's delight because it delivers visible benefits to the protected parties while imposing the costs as a hidden tax on the public. But the higher prices that invariably result are paid by American consumers. In all too many cases, such as textiles and apparel, this burden hits most heavily on the poorest people in our country.

MYTH #4. **Workers in import-affected industries deserve to be treated more generously than other employees.** I know of no reason why workers in industries facing serious international competition should be viewed as more meritorious than, say, defense workers who lose their jobs when government contracts are completed or cancelled. After all, the line of causation from the government's budget deficits to the high-priced dollar to rising imports to reduced employment is far more indirect than the link between a government decision to close a military facility and the resultant economic hardship.

To be sure, programs intended to ease the burden on unemployed workers are a standard part of government activity in the United States, and these general purpose programs will continue to be relied on. But the most effective way of dealing with the rising tide of imports is not to try to dam up foreign trade. Nor is it to create trade adjustment programs that, in effect, become entitlements -- and that discriminate against other workers. It is to increase the competitiveness of American industry.

Recommendations

I would like to suggest five positive approaches to foreign trade policy that would help American business compete. These suggestions constitute "preventative medicine" for the ills of import-related unemployment.

1. Reduce the Budget Deficit

Although the linkages are complex and indirect, I believe that financing a string of $200 billion deficits has increased real interest rates substantially, and that, in turn, has attracted large amounts of foreign capital. That substantial inflow of foreign money has increased the demand for dollars and resulted in a major appreciation of the dollar. The high relative value of the dollar has unfortunately made it easier for foreign companies to compete against American companies, both in our home markets and overseas.

Moreover, reducing the budget deficit is inherently desirable for purely domestic reasons. The trend during the 1980s thus far has been for federal spending to be a rising share of GNP. That trend should be reversed.

2. Gear Tax Reform to Enhance Productivity and Competitiveness

It is sad to note that most tax reform proposals to date ignore the repercussions on international trade. Many of the industries hardest hit by imports are those whose tax burdens would rise the most under the modified flat tax proposals submitted both by members of Congress and the Administration.

This is simply not the time to elevate the development of an ideal tax system to the top of the roster of public issues. Rather, tax policy needs to continue emphasizing incentives for the items important to enhancing our international competitiveness -- saving, investment, and research and development.

3. Renew the Regulatory Reform Effort

The costs of producing goods and services in the United States can be decreased by launching another effort to reduce government regulation of business. The elimination of some economic rule-making has reduced the cost of transportation. This is not, however, a reason to dismantle social regulation. But closer attention to the tremendous costs imposed by EPA, OSHA and other regulatory agencies would help to restore industrial competitiveness.

4. Reduce U.S. Barriers to U.S. Exports

About one-half of our trade deficit with Japan could be eliminated if Congress rescinded the bans on the export of timber and oil. Also, restraints on the export of strategic goods should be administered with common sense. It does not contribute to national security to prevent American companies from selling items overseas that are readily available from foreign competitors.

5. American Business and Labor Must Face the Challenge of Increasing Their Productivity

We cannot blame our poor production practices on foreigners. The answer is not to prop up industries with import restrictions or government subsidies -- or to play King Canute and try to prevent businesses by law from closing or "running away." Rather, labor and management in each company need to face the challenge of enhancing their competitiveness.

Management must show the way. Cutting the proliferation of staff activities and layers of executives creates an operating environment in which labor is more likely to accept changes in needlessly costly factory work rules. Protectionism is counterproductive because it lessens the pressure on management and labor to make the painful but necessary changes that improve productivity. The painful fact is that foreign competition is the most effective spur to greater productivity.

Fundamentally, the future of American industry will not be settled by government directives from Tokyo or Washington -- but by decisions made in business offices and on production floors in Boston, Detroit, Chicago, Pittsburgh, Los Angeles, St. Louis and other major cities throughout the nation.

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Senator QUAYLE. Our next witness is Dr. Herbert Stein, who is a senior fellow at the American Enterprise Institute. And if any of you missed it, I commend yesterday's Wall Street Journal to your reading—Dr. Stein is now head of the Fair Trade Vice Squad, and is nicknamed "Sergeant Smoot" and he has a sidekick named "Hawley," and it is titled "Just The Fair Trade Facts, Ma'am."

So, Dr. Stein, Sergeant Smoot, whatever you would like to go by this morning, we are delighted to have you. Just pull the microphone up so everybody can hear you and proceed at your pleasure.

Dr. STEIN. Well, thank you, Mr. Chairman. I am not appearing today in my role as Sergeant Smoot.

I would like to present a few basic facts about the relation between foreign trade and employment. They turn out to be the same basic facts that Mr. Weidenbaum presented, which I hope you will find more surprising than boring.

Mr. Weidenbaum referred to four myths that he wanted to dispel, and I am about to dispel a fifth one, which is that economists never disagree.

In fact, I would like to submit for the record a statement that three economists from other research institutions in Washington and I issued yesterday on the subject of trade policy, which will indicate a certain breadth of agreement on this subject.

But here are my facts. During the period of our rising trade deficit from 1980 to 1985, total employment increased by 8 million. Total employment as a percent of the population over 16 years of age is as high as it has ever been. Between 1980 and 1985, employment declined in some industries, but rose much more in others.

If you look at the 68 two-digit industries in which the Department of Labor classifies the U.S. economy, you find that since 1980, employment declined in 23 of these industries, that had 16.9 million employees in 1980; the decline in those industries was 1.6 million. But employment rose in 45 other industries; those were industries that had 57.4 million employees in 1980, and the rise in those industries was 9.4 million.

Some of the industries with the largest employment gains were: Business services, legal services and architecture, 2 million; wholesale and retail trades, excluding eating places, 1.9 million; health services, 1 million; eating and drinking places, 900,000.

Contrary to the common belief, the shift of employment has not been to unskilled, low-income occupations. Between 1983 and 1985, when total employment increased by 5.5 million, or 5.3 percent, employment in managerial and professional occupations increased by 2.3 million, or 10 percent. Employment in precision, craft, and repair occupations increased by 1.1 million, or 8.7 percent. Employment of food service workers, on the other hand, increased by only 89,000, or 1.8 percent—which is why it is so hard to get the waiter's attention.

Unemployment is now, in September 1985, lower than any month since April 1980, except for August 1985, when it was one-tenth of a percentage point lower.

Unemployment of workers from some industries has increased, of course, but these are few. In the last 2 years, there has been a significant increase of unemployment only for workers from the electrical equipment industries.

Some of the industries about which there has been most concern had little or no increase of unemployment. For example, unemployment of people whose last employment was in textile mills was lower in August 1985 than in any August of the previous 5 years. I use August because these figures are not seasonally adjusted, and I want to have the same time of the year.

Although employment in textile mills had declined by 120,000, or 15 percent, in 5 years, those job losers did not remain unemployed.

There is no basis for the belief that the slowdown of the economy in the past five quarters is due to the increase of net imports. During the six quarters of rapid expansion, from the fourth quarter of 1982 to the second quarter of 1984, when real GNP was rising by $26.7 billion a quarter in 1972 prices, net imports rose by $5.9 billion a quarter. In the five quarters of slow increase in the overall economy, from the second quarter of 1984 to the third quarter of 1985, when real GNP rose by only $9.2 billion a quarter, net imports rose by only $4.5 billion a quarter. Net imports rose faster when the economy was rising rapidly than when it was rising slowly.

These results are consistent with what economic analysis would have predicted. That is, there is no contradiction in this case between the theory and the practice, or between the world of theory and the real world. There is no reason in economic logic for an increase of net imports to cause a decline of employment. The net imports of goods and services are exactly matched by an import of capital which is indirectly a demand for American output and employment.

Thank you.

Senator QUAYLE. Thank you very much, Dr. Stein.

[The prepared statement of Dr. Stein and the joint statement on trade policy referred to follow:]

Statement
of
Herbert Stein
to the
Subcommittee on Employment and Productivity
Labor and Human Resources Committee
United States Senate
October 22, 1985

I would like to present a few basic facts about the relation between foreign trade and employment.

1. During the period of our rising trade deficit, from 1980 to 1985, total employment increased by 8 million.

2. Total employment as a percent of the population over 16 years of age is as high as it has ever been.

3. Between 1980 and 1985 employment declined in some industries but rose much more in others.

Employment declined in 23 private non-agricultural industries that had 16.9 million employees in 1980. The decline was 9.6 percent or 1.6 million.

Employment rose in 45 private non-agricultural industries that had 57.4 million employes in 1980. The rise was 16.4 percent, or 9.4 million.

4. Some of the industries with the largest employment gains were:

Business services, legal services, architecture	2.0 million
Wholesale and retail trades, excluding eating places	1.9 million
Health services	1.0 million
Eating and Drinking places	.9 million

5. Contrary to common belief, the shift of employment has not been to unskilled, low-income occupations. Between 1983 and 1985 when total employment increased by 5.5 million, or 5.3 percent, employment in managerial and professional occupations increased by 2.3 million or 10.0 percent. Employment in precision production, craft and repair occupations increased by 1.1 million

or 8.7 percent. Employment of food service workers, on the other hand, increased by only 89 thousand, or 1.8 percent.

6. Unemployment is now (September 1985) lower than any month since April 1980, (except for August 1985 when it was one-tenth of a percentage point lower). Unemployment of workers from some industries has increased, but these are few. In the last two years there has been a significant increase of unemployment only for workers from the electrical equipment industries. Some of the industries about which there has been most concern had little or no increase of unemployment. For example, unemployment of people whose last employment was in textile mills was lower in August 1985 than in any August of the previous five years. Although employment in textile mills had declined by 120 thousand, or 15 percent, in five years those job-losers did not remain unemployed.

7. There is no basis for the belief that the slow-down of the economy in the past five quarters is due to the increase of net imports. During the six quarters of rapid expansion, from the 4th quarter of 1982 to the 2nd quarter of 1984, when real GNP was rising by $26.7 billion a quarter (1972 prices) net imports rose by $5.9 billion a quarter. In the five quarters of slow increase in the overall economy, from the second quarter of 1984 to the third quarter of 1985, when real GNP rose by only $9.2 billion a quarter, net imports rose by only $4.5 billion a quarter. Net imports rose faster when the economy was rising rapidly than when it was rising slowly.

8. These results are consistent with what economic analysis would have predicted. There is no reason in economic logic for an increase of net imports to cause a decline of employment. The net imports of goods and services are exactly matched by an import of capital which is indirectly a demand for American output and employment.

JOINT STATEMENT ON TRADE POLICY

Today, as individuals associated with leading policy research organizations in Washington, we are joining together to express our concern over the growing calls for trade protectionism. We support the efforts of the President and all those within Congress who seek to maintain and expand international trade. We all share a common belief in the value of free and open trading arrangements among the nations of the world and oppose the "solutions" of the protectionists.

Support for free trade is almost universal among economists and others who have studied the issue. Yet, special interest groups, finding themselves losing out in the marketplace, have been all too successful in their lobbying efforts, gaining special "protection" and thus limiting consumer choice. Such protectionist policies impose major costs on American consumers and unfairly restrict their ability to purchase those products they prefer. Rather than expanding employment, trade restrictions save some jobs at the expense of others. Further, closed markets generally weaken the most dynamic, productive industries, thereby weakening the U.S. economy. Finally, U.S. protectionist policies would not eliminate the trade deficit. They might trigger retalitory restrictions from abroad and increase international tension.

The U.S. economy as a whole is not suffering because of imports, contrary to protectionist claims. Employment has increased by 8 million in the past five years. Unemployment is lower than in any year since 1979. Manufacturing production is at an all-time high. Total output in the United States has increased 13% since 1980 while we moved from a big trade surplus to a trade deficit.

It is true that other nations impose obstacles to imports from us. We also impose obstacles to imports from other countries. The proper remedy for this is not to escalate a war of retalitory protectionism. The remedy is to push for agreement on trade liberalization for all.

There are always some workers, firms, and industries hurt by competition, whether foreign or domestic. But this competition is healthful. Protecting every worker, every firm, and every industry from competition would stultify the American economy and diminish the incomes of the American people.

Our message today is a simple one. Congress should not repeat the mistakes of the past. As individuals associated with the American Enterprise Institute, The Brookings Institution, Cato Institute, and The Heritage Foundation, we urge all within Congress and the Administration to avoid protectionist policies and support expansion of international free trade.

Dr. Robert W. Crandall
Senior Fellow
Brookings Institution

Dr. William A. Niskanen
Chairman
Cato Institute

Dr. Edward Hudgins
Walker Fellow in Economics
Heritage Foundation

Dr. Herbert Stein
Senior Fellow
American Enterprise Institute

October 21, 1985
Washington, D.C.

Senator QUAYLE. Our final witness today is Dr. Christopher Caton, who is the director of long-term studies of Data Resources, Inc., in Lexington, MA.

Dr. Caton, welcome to the committee. Please proceed.

Dr. CATON. Thank you.

I have submitted a paper. I would like to begin by apologizing both for its length and its somewhat technical nature. Its length was due to the fact that it was necessary for me to prepare it in 1 day—and Sir Winston Churchill once said that he had written a long letter because he did not have time to write a short letter—now I know what he meant.

In the time available to me, all I could do was pull together material which already existed in some other form. In doing so, I inadvertently left the name of my coauthor, Roger Brinner, the chief economist at Data Resources, off the paper.

Despite its length, I missed out on a couple of key linkages which would have helped interpretation had they been there. The paper deals with a number of exercises using the Data Resources model of the U.S. economy now—I think the reputation of that model speaks for itself. But it is important for me to stress that it is after all a model and not necessarily the real world. There are always many abstractions in a model. We asked if a number of questions, and the paper summarizes the answers.

The first question that we asked the model is: What would have happened if, over the last 5 years, the exchange rate had in remained flat at its 1980 level instead of appreciating? The results are shown on page 2 of the paper, and I will summarize them briefly.

Without wishing to contradict in any way what was said on my left, it is our assessment that the level of output in the economy would indeed be higher this year had the exchange rate remained flat. The level of GNP would be some 4 percent higher; exports and imports would both be approximately equally affected—exports would be 15 percent higher, imports about 14 percent lower. Inflation would clearly be worse. The net export position of this economy would be improved by some $60 billion, which of course is significantly less than the overall trade deficit at the moment. And manufacturing employment would be increased by some 1.5 million; total employment, by some 2 million.

Now, I stress that this is a model result. I also share Mr. Brock's concern about over-quantification. I subscribe to a theory that God placed economists on this Earth simply because numbers are incapable of lying by themselves, and so I would not want too much stress to be placed on the exact numbers here. Also in particular, I stress that all we did was give the model a lower exchange rate without asking how this lower exchange rate could indeed have come about. It is our analysis—and I have a separate sheet here which I would like to add to the record—that the main reason for the strength of the exchange rate in the past 5 years has indeed been a significant difference in bond yields or long-term interest rates here and abroad. It is the "long-term" that is important here. Economic theory says this yield spread between here and the rest of the world should be related to the Federal Government deficit, and it can be shown indeed that there is a strong correlation between the two. So there is a clear link from the Federal deficit in the last 5 years to appreciation of the exchange rate.

The implication that I draw is that the economy primarily has one deficit problem, and if that is accepted, then it follows that policy should be directed at fixing the illness, that is, the Federal deficit, and not necessarily the symptom, that is, the trade deficit.

That leads one to a policy prescription which has a lot in common with what has already been said on my left. What one really needs to do is to get out of a situation where U.S. Government bonds offer 10½ percent, Germans get 6½ percent on their money and the Japanese get 6 percent on theirs. This leads naturally to greater demand for dollars, which is what causes capital inflow, and which is what causes the trade deficit.

I have a series of policy prescriptions which would narrow these interest rate spreads over the next 2 years.

First of all, adherence to the budget resolution plus further spending cuts and preferably, some tax increases in 1987.

Second, relatively generous monetary targets for the United State, as long as producer price inflation remains low.

The other points that I make here are not within the immediate purview of Congress, but I am sure that influence can be exerted.

Third, expanded overseas investment of Japanese funds, thus raising costs and yields of yen-denominated investments to world levels, and greater access to the Japanese market.

Fourth, personal tax cuts in Europe and Japan, with no reductions in government spending. I think there was a clear implication that such cuts were expected after the G–5 meeting, although the statements made overseas since then do not give one much encouragement.

Fifth, continuation of moderately conservative monetary policies in the Common Market to Japan and Canada.

There are some more quantitative results in this paper. Let me just draw your attention to two of them. We analyzed the possible impact on the economy of what was a popular measure at one stage; namely, an across-the-board tariff increase. We picked the number of 20 percent.

An across-the-board tariff has two attractive features. It makes imports less attractive relative to domestic production. It also raises revenue and hence helps the Federal deficit as well as the trade deficit. But it also constitutes a significant real income loss to consumers, and it constitutes an inflationary shock to the economic system.

A model of the economy is one way to sort out these disparate influences. Our model suggests that a 20-percent across-the-board tariff would in fact cause the U.S. economy to lose jobs in the first year of its enactment, simply because the effects of the real income loss and the inflationary shock to the system would outweigh the twist, if you like, toward domestic production and away from imports.

Those results are summarized on page 8 of the paper.

What if we use the model to analyze the policy which I mentioned? The answer will depend upon the numbers that one puts in, particularly for the third step. There is a study by the Departments of Commerce and State which suggests that freeing up the

Japanese market would enable us to export to Japan some $10 to $15 billion more per year of goods. Assuming that that is a correct estimate, and implementing the other policies which I mentioned, causes the U.S. economy, in our estimate, to gain some 200,000 jobs in the first year and some 500,000 eventually. Measured against a tariff, that is clearly a far superior way to go.

Thank you.

Senator QUAYLE. Thank you very much, Dr. Caton.

[The prepared statement of Dr. Caton follows:]

THE EFFECTS OF THE TRADE DEFICIT AND CURRENT TRADE POLICY OPTIONS

by
Roger E. Brinner
and
Christopher N. Caton
Data Resources, Inc.
Lexington, Massachusetts

October 22, 1985
before the
Subcommittee on Employment and Productivity
of the Committee on Labor and Human Resources
United States Senate
Washington, D.C.

THE EFFECTS OF THE TRADE DEFICIT AND CURRENT TRADE POLICY OPTIONS

By Christopher N. Caton

The sharp appreciation of the dollar since mid-1980 has been the major factor that has pushed the United States into a serious foreign trade deficit. To be sure, a stronger economic recovery in the U.S. than abroad has also contributed to our trade deficit. Careful analysis reveals, however, that our net export position is now approximately $60 billion worse than it would have been had the dollar remained at its 1980 level (Table 1).

A strong dollar is good if it is justified by the productivity of the nation. A currency with a relatively high value allows the United States to import goods more cheaply and provides a direct benefit to the consumer. But if the dollar is priced so high that producers cannot manufacture comparable goods at comparable cost, then jobs will be lost. Tables 2 and 3 make it very clear that this has indeed been the case during the first half of the 1980s: the number of manufacturing jobs is over 1.4 million lower today than it could have been if the dollar had maintained the reasonable values of 1980 rather than appreciated to the exceptional levels we see today.

The influence of the dollar on the economy is not a new phenomenon. The exhibits on trade shares clearly reveal the impact of a very strong dollar during the 1960s. Similarly, the swings in the U.S. share during the 1970s very closely correspond to changes in the value of the currency: after the dollar declined against the yen and Deutsche mark in 1977 and 1978, U.S. export performance improved in 1978 and 1979. There is a clear and logical correlation here.

Table 1
The Macroeconomic Impact of the Dollar's Exchange Rate
(Comparison of the Weak Dollar case with history and the Strong Dollar projection)

	1981	1982	1983	1984	1985	1986	1990
(Percent Difference)							
Dollar Exchange Rate	-8.2	-17.6	-21.3	-26.9	-29.8	-30.7	-35.1
Real Dollar Exchange Rate	-8.4	-15.1	-17.5	-21.9	-23.5	-23.4	-23.4
Real GNP	0.1	1.0	2.0	3.2	4.2	5.0	6.3
Consumption	0.0	0.0	0.1	0.3	0.5	0.8	1.3
Business Investment	0.0	0.0	1.0	2.7	5.1	7.8	14.0
Residential Investment	0.1	0.1	-0.9	-1.4	-1.6	-1.8	-1.9
Federal Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	0.0	0.1	0.5	1.1	1.9	2.5	3.8
Exports	0.9	5.8	10.4	12.8	15.4	16.2	16.3
Imports	-0.5	-4.5	-9.5	-13.0	-14.3	-14.7	-12.9
Consumer Price Index	0.3	1.2	2.1	3.2	4.6	5.9	12.4
Wholesale Industrial Prices	0.8	3.0	4.7	6.6	8.5	9.6	17.0
Merchandise Import Prices	5.5	14.8	20.5	25.8	31.6	33.2	41.0
Merchandise Export Prices	0.4	2.3	4.5	6.8	9.4	11.3	21.0
Real Disposable Income	-0.1	0.0	0.4	0.9	1.3	1.8	3.1
Real Profits after Tax	-0.2	3.9	8.8	13.8	18.7	20.0	9.7
Industrial Production	0.4	2.6	4.7	7.4	9.4	10.5	11.8
(Difference, Units)							
Net Exports ($Bil.)	-10.1	11.9	28.1	47.5	80.6	73.5	90.2
Unemployment Rate (%)	0.0	-0.4	-0.8	-1.1	-1.5	-1.8	-1.8
Employment (Millions)	0.0	0.4	0.9	1.4	2.0	2.3	2.4
High-Grade Corp. Bond Rate (%)	0.0	0.3	0.6	1.1	1.4	1.7	2.2
Car Sales (Millions)	0.0	0.1	0.1	0.3	0.4	0.5	0.4
Federal Budget Surplus ($Bil.)	0.4	11.4	25.3	47.6	67.1	85.6	134.3

Table 2
The Dollar's Impact on Manufacturing Production
(Percent difference in level, comparing the Weak Dollar case with the Strong Dollar case)

	1981	1982	1983	1984	1985	1986	1990
Manufacturing Production	0.4	2.6	4.7	7.4	9.4	10.5	11.8
Nondurables:	0.3	1.8	3.5	5.9	7.3	8.0	9.1
Foods	0.1	0.7	1.2	1.5	1.8	2.0	2.2
Textile Mill Products	0.5	3.3	6.3	13.5	16.6	17.8	19.5
Apparel Products	0.5	3.1	5.8	10.7	11.9	12.5	13.4
Paper and Products	0.4	2.0	3.4	4.6	5.8	6.5	7.9
Printing and Publishing	0.0	0.1	0.5	1.4	2.0	2.5	3.6
Chemicals and Products	0.6	3.1	5.5	8.6	10.6	11.6	13.2
Petroleum Products	-0.1	-0.4	-0.3	0.1	0.6	0.9	2.2
Rubber and Plastics	0.2	2.1	4.3	8.1	10.2	11.3	12.7
Leather and Products	0.8	4.4	8.1	19.0	21.1	21.9	27.2
Durables:	0.6	3.8	6.7	9.9	12.8	14.3	15.7
Lumber and Products	0.4	2.2	3.3	4.5	6.9	8.2	11.6
Furniture and Fixtures	0.0	0.4	1.0	2.7	3.6	4.7	7.4
Clay, Glass and Stone	0.2	1.4	2.6	4.5	5.6	8.3	9.2
Primary Metals	0.5	3.8	6.6	10.5	13.8	15.2	15.6
Fabricated Metal Products	0.3	2.3	4.5	6.8	9.0	10.7	13.0
Nonelectrical Machinery	0.6	5.0	9.0	11.5	15.1	17.5	21.3
Electrical Machinery	0.9	5.6	9.7	13.9	17.4	18.8	19.2
Transportation Equipment	0.5	3.2	5.5	8.9	11.1	12.2	10.6
Instruments	0.7	4.4	8.4	13.3	17.3	19.8	23.4
Miscellaneous Manufactures	0.6	4.0	8.1	15.7	19.0	21.5	26.4

Table 3
The Dollar's Impact on Manufacturing Employment
(Difference in level, thousands of dollars, comparing the Weak Dollar case with the Strong Dollar case)

	1981	1982	1983	1984	1985	1986	1990
Manufacturing Employment	45	365	709	1,108	1,453	1,674	1,803
Nondurables:	13	104	201	325	416	469	483
Food and Products	2	16	27	31	33	37	32
Textile Mill Products	2	15	30	58	78	85	85
Apparel and Products	3	22	47	84	112	126	128
Paper and Products	1	9	15	18	21	23	24
Printing and Publishing	1	8	12	14	14	18	18
Chemicals and Products	2	17	34	51	66	79	92
Petroleum and Products	0	1	1	0	0	0	-1
Rubber and Plastics	1	11	23	45	63	72	81
Leather and Products	1	6	11	23	28	24	25
Durables:	32	261	508	783	1,037	1,207	1,319
Lumber and Products	2	12	23	31	40	52	48
Furniture and Fixtures	0	3	5	11	17	22	36
Stone, Clay and Glass	1	7	13	20	29	37	47
Primary Metal Industries	3	18	32	51	69	79	81
Fabricated Metal Products	4	26	52	85	120	146	184
Machinery Except Electrical	8	72	139	194	250	297	337
Electrical Machinery	7	67	129	193	241	259	237
Transportation Equipment	6	36	67	114	157	176	159
Instruments	1	11	24	38	55	72	103
Miscellaneous Manufacturing	1	11	24	45	59	66	73

The global economy remains close to a trade crisis. The strong dollar produced by conflicting international policies, and the belief that the United States offers a more open market than U.S. producers face abroad, have made protectionism a live policy option.

Although it is almost certain that policy adjustments both here and abroad will be made in the next year, these changes could develop into a protectionist fiasco or an expansionist success. The U.S. manufacturing and agriculture sectors may have the political clout to obtain some Congressional protection through quotas, tariffs, or subsidies. The better multinational choice is an expansion of overseas spending (stimulated by tax cuts), coupled with an expansion of the U.S. share of markets through a weaker dollar and more open Japanese buying practices.

The "Group of Five" finance ministers--representing France, Germany, Japan, the United Kingdom, and the U.S.--have announced an exchange intervention program to reduce the dollar's value. They have also hinted at monetary and fiscal policy changes designed to justify this lower level. Congress will mull over these initiatives as it moves ahead on the hundreds of trade bills currently under consideration.

POLICY OPTIONS

Exchange Intervention: Intervention can change currency values for a limited amount of time, in advance of an adjustment in economic fundamentals. The announced intervention program represents a wager by the Treasuries and central banks that the dollar deserves a lower value. Although traders will be reluctant to bet against the intervention, financial fundamentals will eventually dominate. For example, a 10-year

U.S. government bond offers 10.5%, versus 6.5% for a German bond or 6.0% for a Japanese bond; today's bond yields thus roughly cover a 40-45% decline in the dollar against the mark and the yen over the next decade. The market is neither irrational nor is it moved primarily by abstract notions such as "safe havens"; all policy moves will therefore be judged on their ability to narrow these spreads and thus bring the dollar closer to reasonable long-term values.

Fiscal and Monetary Mix: Narrower spreads can be achieved through any, and hopefully all, of the following measures: (1) adherence to the U.S. House-Senate budget resolution, plus further spending cuts and probably some tax increases in 1987; (2) relatively generous monetary targets for the U.S. as long as producer price inflation remains low; (3) expanded overseas investment of Japanese funds, thus raising costs and yields of yen-denominated investments to world levels; (4) personal tax cuts in Europe and Japan, with no reductions in government spending; and (5) continuation of moderately conservative monetary policies in the Common Market, Japan, and Canada.

Unfortunately, news releases concerning proposed Group of Five fiscal policy adjustments are not encouraging. The U.S. representatives had been convinced that France, Germany, Japan, and the U.K. agreed to change their policies while we would remain on the course already set by the budget resolution. In their announcements to their home constituencies, however, none of the finance ministers indicated they planned major new initiatives or an acceleration of previously proposed tax cuts:

> Mr. Lawson (U.K.) reaffirmed the Conservative government's plan to cut income taxes, but gave no timetable.... West German Finance Minister Gerhard Stoltenberg also showed no inclination to push forward to 1987 a tax cut planned for 1988.... In Tokyo, officials at the Finance Ministry said Sunday's

> announcement did not imply any major policy changes for either fiscal or monetary authorities...that might promote domestic economic growth.... Indeed, European officials said that the major policy change is not required on their part, but by the U.S.[1]

Given that the U.S. feels that it has already promised to make its contribution for fiscal 1986 by cutting the deficit, greater collaboration from the other four nations is essential. Indeed, if such cooperation is not forthcoming, the Group of Five conference may well have been counterproductive by breeding cynicism and anger in the United States.

Protection: The greatest opportunities for opening up markets are in Japan. According to a report by the U.S. Departments of Commerce and State, exports to Japan would be $10-15 billion higher if Japanese markets were as open as those of our other industrialized partners. Although these estimates are quite broad and the background trade-share analysis cannot precisely discriminate between a closed market and an exceptionally undervalued yen, related case studies of telecommunications, electronics, tobacco, and consumer products markets bear out the general proposition that Japan enjoys greater access to overseas markets and technologies than it offers to others.

If overseas economies are not bolstered by tax cuts and if the U.S. share here and abroad cannot be expanded by a more competitive dollar, U.S. protectionist measures will be difficult to resist politically. If all parties agree that current dollar values are unrealistic, it does not make sense to weaken or to shed industries here because of today's uncompetitive stance. Unfortunately, tariffs and quotas will often fail to address these symptoms, much less the causes of the problem.

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[1] Wall Street Journal, September 24, 1985, p. 33.

Table 5
Commerce Department Estimates of Potential Additional U.S. Exports Assuming An Open Japanese Market
(Data are for 1982 unless otherwise noted)

Sector	Potential Additional U.S. Exports (1) (Millions)
Telecommunications (2)	$ 750
Forest Products	2,000
Paper	500
Wood Products	1,500
Electronics	2,150
Components	1,075
Computers	1,075
Medical Equipment and Pharmaceuticals	750
Medical Equipment	400
Pharmaceutical	350
Tobacco Products (Cigarettes)	1,900
Chemicals	1,500
Cosmetics	1,500
Services	
Insurance	200
Brokerage	50
Mutual Funds	50
Processed Foods	NA
Confectionery (mainly chocolate)	50-75 by 1990 (3)
Aluminum	90-100 by 1992-3 (3)
Machine Tools	175
Fish	400 (4)
Beef	280 (4)
Citrus	40 (4)

Note: Differences in industry sector and trade definitions make most of the above data only roughly comparable; in addition, the U.S. share of the world market is the export share only and does not include sales of U.S. affiliates abroad (both exports and "domestic" sales), which are considerable for electronics, tobacco, chemicals, and cosmetics (and probably others). For example, the U.S. share of the world computer market is over 70% if sales of U.S. subsidiaries are included and over 35% of the Japanese market.

(1) Typically derived by making U.S. share of Japanese market equal to U.S. share of world market; in instances where this was not meaningful, simply estimated.
(2) Equipment only; data on telecommunications services not readily available.
(3) Assuming Japanese tariffs are reduced to the level of U.S. tariffs for comparable items.
(4) Assuming that Japanese import quotas are lifted.

Consider three alternative types of protection: a tariff on all imported goods, a set of tariffs (or quotas) on a selected category of goods from all countries, and a tariff on all goods from a selected country (or set of countries). The first option, a broad tariff, would tend to strengthen the dollar, raise U.S. interest rates and inflation, and weaken GNP and industrial production growth. Although both the federal budget and foreign trade deficits would be reduced, the economy would be hobbled by higher costs for almost every item consumed by U.S. citizens or produced for sale here and abroad. Only if the Federal Reserve were to ignore this inflation completely and other nations eschewed retaliation could this strategy provide even a small near-term improvement.

A tariff restricted to a subset of goods would only help to the extent that the goods are not an input to other U.S.-made goods (whose marketability would be hurt by the tariff) or to the extent that new activities cannot be found for the workers and capital associated with the threatened industry. Steel tariffs present a difficulty precisely because domestic steel users will try to evade the tariff by substituting other materials or by buying the steel and fabricating the final products abroad. The steel industry understands this and therefore sought only temporary relief while it reduced costs and supported action on the federal budget to reduce the dollar's value. The textile and footwear industries fit the second category: the dollar's rise has overwhelmed these industries with intolerably large market losses.

The final tariff option, a broad tariff against a small list of countries, makes sense if it can be successfully used as a bargaining device to open unfairly closed markets. Imposition of a 20% country-specific tariff could provide foreign central governments the national leverage to reverse protectionist pressures in individual industries. To avoid or reduce the tariff, the targeted nation would have to reduce its multilateral

Table 4
Dynamic Effects of a 20% Import Surcharge
(Difference from basecase)

	1986	1987
Federal Surplus* (Billions)	-62	-65
Current Account* (Billions)	-54	-66
Gross National Product (%)	-0.4	-0.6
Consumption (%)	-0.8	-1.2
Business Fixed Investment	-0.5	-0.8
Residential Investment (%)	-0.7	-0.8
Government Spending (%)	0.0	-0.1
Exports (%)	-0.5	-0.9
Imports (%)	-3.4	-4.5
Industrial Production (%)	-0.3	-0.2
Consumer Price Index (%)	1.0	1.9
Exchange Rate (%)	0.6	1.7
Money Supply (M2) (%)	0.7	0.9
Unemployment Rate (%)	0.1	0.2
3-Month T-Bill Rate (Basis points)	0	30
Housing Starts (Thousands)	0	-11
Car Sales (Thousands)	-600	-700
Employment (Thousands)	-100	-260

*Negative numbers indicate a smaller deficit.

Chart 1
Real GNP Growth Rates (SAAR)

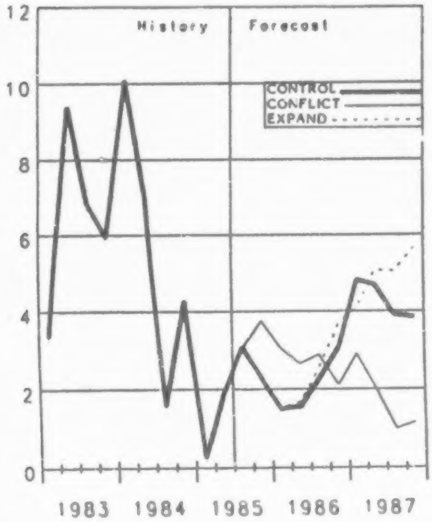
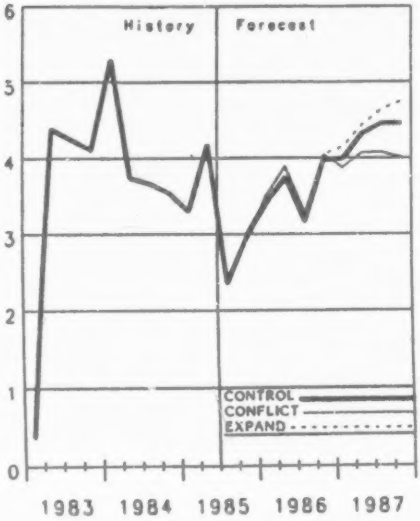


Chart 2
Consumer Price Inflation (SAAR)



trade surpluses according to a negotiated schedule. In the case of a country such as Japan, multilateral surpluses must be the measure of compliance, or our gain could become a Canadian, European, or LDC loss.

IMPACTS OF TRADE-RELATED POLICIES

The DRI Model provides a useful format for quantifying the opportunities and the risks of alternative trade policies. The results of our analysis of a general import tariff of 20% in 1986 and 1987 are summarized in Table 4. Half the burden of the tariff is assumed to be borne by foreign producers (that is, they cut their prices by 10% in response to the tariff) and half by the domestic economy. Nevertheless, the tax would still reduce U.S. manufacturing output and employment through its impacts on the exchange rate, real consumer income, imported intermediate goods prices, and domestic credit costs.

The role played by monetary and fiscal policies can best be illustrated by comparing two simulations designated CONFLICT and EXPAND. The first assumes that the U.S. passes no deficit reduction measures and that foreign governments take no action to stimulate their economies--in other words, that the conflicts between U.S. fiscal and monetary policies and between U.S. and foreign fiscal policies continue. Interest rates rise sharply as the federal demand for national savings continues to grow. Although stronger federal spending sustains growth through 1986, the U.S. economy moves into a recession in 1987. The spread between U.S. long-term bonds and foreign bonds once again widens: after averaging 2.4% in 1984 and falling to 1.1% as of the third quarter of 1985, the spread expands to 3.3% by 1987. This holds the dollar firm. The Morgan Guaranty index is projected to be 1.27 in 1985, 1.14 in 1986, and 1.23 in 1987, slightly below the value of 1.28 immediately before the the Group of Five conference.

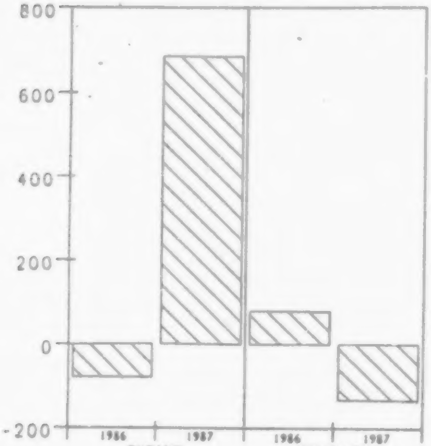
Table 6
Employment Effects of Unchanged
Foreign and Domestic Policies--CONFLICT
(Difference in thousands, from CONTROL1085)

	1986	1987
Nonagricultural Establishments......	477	-74
Contract Construction..............	2	-119
Finance, Insurance & Real Estate...	13	-15
Mining.............................	3	-10
Transportation and Public Utilities	33	-4
Services...........................	72	-4
Wholesale and Retail Trade.........	122	176
Federal Government.................	39	70
State and Local Governments........	12	45
Manufacturing......................	180	-220
Nondurables Manufacturing.........	53	-26
Food and Products................	10	0
Tobacco Products.................	0	0
Textiles and Products............	8	-3
Apparel and Products.............	9	-4
Paper and Products...............	4	-1
Chemicals and Products...........	6	-4
Printing and Publishing..........	4	3
Petroleum Products...............	0	0
Rubber and Plastics Products.....	11	-6
Leather and Products.............	0	-10
Durables Manufacturing............	127	-194
Lumber and Wood Products.........	-1	-33
Furniture and Fixtures...........	6	-1
Stone, Clay, and Glass...........	3	-9
Primary Metal Industries.........	10	-12
Fabricated Metal Products........	21	-1
Nonelectrical Machinery..........	13	-66
Electrical Machinery.............	12	-88
Transportation Equipment.........	56	33
Instruments and Parts............	3	-8
Miscellaneous Manufacturing......	4	-9

Table 7
Employment Effects of a
Foreign Economic Expansion--EXPAND
(Difference in thousands from CONTROL1085)

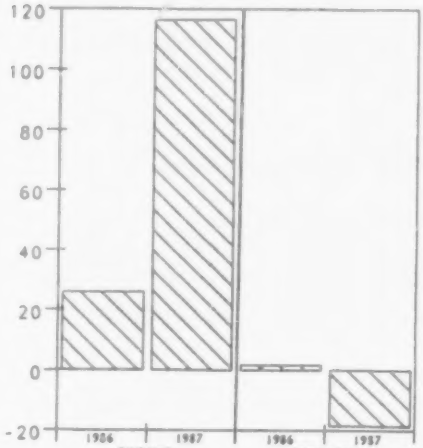
	1986	1987
Nonagricultural Establishments......	15	113
Contract Construction..............	4	34
Finance, Insurance & Real Estate...	0	1
Mining.............................	1	4
Transportation and Public Utilities	2	13
Services...........................	0	8
Wholesale and Retail Trade.........	-3	-57
Federal Government.................	0	-8
State and Local Governments........	0	0
Manufacturing......................	13	118
Nondurables Manufacturing.........	2	15
Food and Products................	1	4
Tobacco Products.................	0	0
Textiles and Products............	0	0
Apparel and Products.............	0	-1
Paper and Products...............	0	1
Chemicals and Products...........	0	4
Printing and Publishing..........	0	-1
Petroleum Products...............	0	0
Rubber and Plastics Products.....	1	5
Leather and Products.............	0	2
Durables Manufacturing............	11	103
Lumber and Wood Products.........	1	11
Furniture and Fixtures...........	0	1
Stone, Clay, and Glass...........	0	4
Primary Metal Industries.........	1	7
Fabricated Metal Products........	1	3
Nonelectrical Machinery..........	2	31
Electrical Machinery.............	3	37
Transportation Equipment.........	1	2
Instruments and Parts............	0	3
Miscellaneous Manufacturing......	0	4

Chart 3
Change in Manufacturing Employment*
(Thousands)



*Year-end level compared to most recent quarter, 1985:2.

Chart 4
Changes in Corporate Profits Before Taxes*
(Billions of dollars)



*Year-end levels compared to most recent quarter, 1985:2.

Chart 5
Real Goods Exports As a
Percent of Real GNP

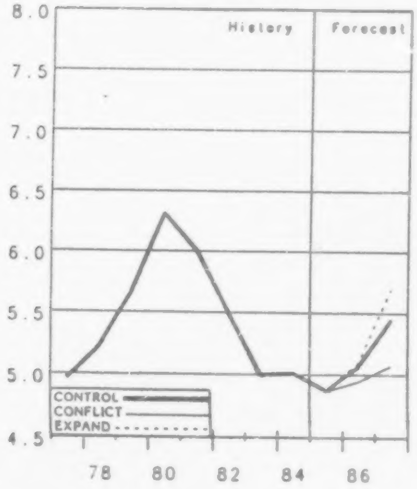
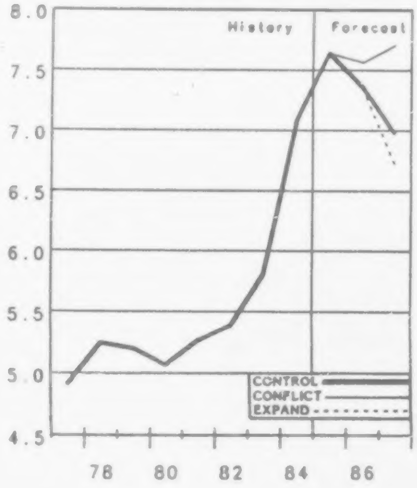


Chart 6
Real Goods Imports As a
Percent of Real GNP

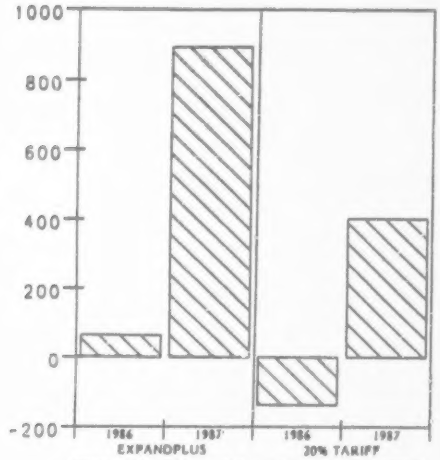


The EXPAND scenario, in contrast, incorporates the Control package of federal spending cutbacks, as well as an additional deficit reduction package for 1987 that includes a 2.5% personal and corporate tax surcharge, a 2.5% reduction in entitlements and military spending (relative to the baseline), and a ceiling of 2.0% on federal civilian and military pay increases. Looser monetary policy offsets this fiscal restraint and supports a multinational currency intervention effort. At the same time, Japan, Canada, and the European nations cut taxes to expand their growth by 1% relative to the Control by late 1986; the fiscal stimulus is assumed to be sufficiently large to overcome the greater competitiveness of U.S. producers.

This set of policy initiatives induces a major adjustment of relative interest rates, and hence of the dollar's exchange rate. The new economic environment generates substantial growth of U.S. exports, with large feedback effects on domestic income and output. Because U.S. taxes are increased at the same time that federal spending is reduced, the switch to more expansionary monetary policy and a weaker dollar does not produce a problematic increase in inflation. Although the artificially low inflation rates generated by the strong dollar clearly cannot continue, a major wage-price spiral is unlikely.

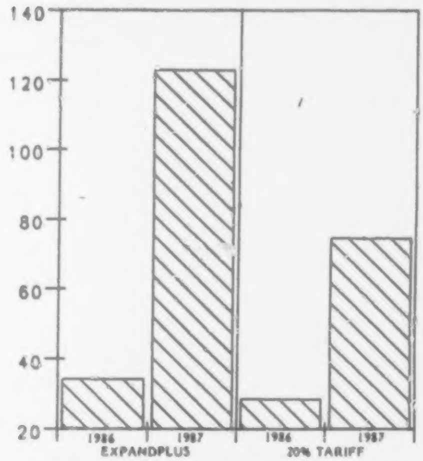
If Japanese markets could be opened without imposing a tariff, even greater optimism for the U.S. economy would be justified. Table 5 presents the Commerce Department's calculation of the market potential lost due to restrictive Japanese trade practices. In the EXPAND-PLUS simulation, U.S. export demands are raised by these magnitudes over the course of 1986. Obviously, real economic growth would be greater; equally important, the dollar would be strengthened because we could balance our international goods and capital accounts even with stronger prices for our products. These results

Chart 7
Change in Manufacturing Employment*
(Thousands)



*Year-end level compared to most recent quarter, 1985:2.

Chart 8
Changes in Corporate Profits Before Taxes*
(Billions of dollars)



*Year-end level compared to most recent quarter, 1985:2.

Chart 9
Real Goods Exports As a
Percent of Real GNP

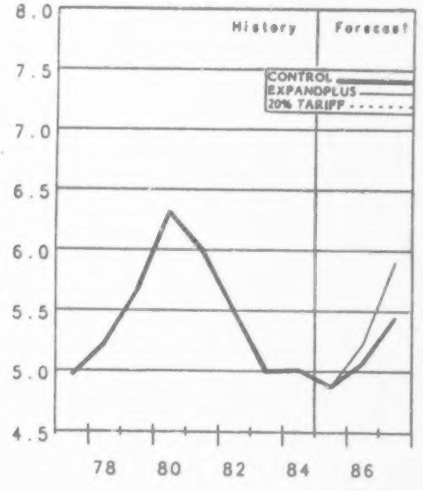


Chart 10
Real Goods Imports As a
Percent of Real GNP

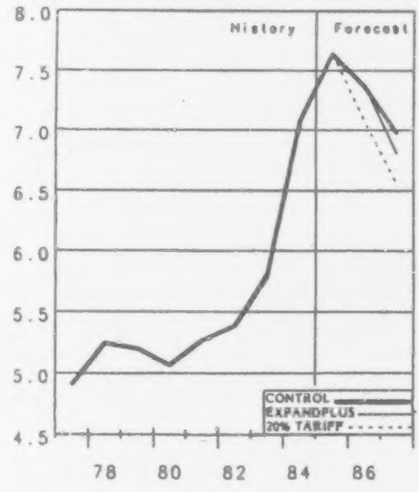


Table 8
Employment Effects of a Foreign Economic Expansion Plus a Liberalized Japanese Trade Policy
(Difference in thousands from CONTROL1085)

	1986	1987
Nonagricultural Establishments......	162	483
Contract Construction..............	9	48
Finance, Insurance & Real Estate...	4	10
Mining.............................	6	11
Transportation and Public Utilities	13	42
Services...........................	23	67
Wholesale and Retail Trade.........	19	-3
Federal Government.................	0	-8
State and Local Governments........	0	-1
Manufacturing......................	88	318
Nondurables Manufacturing..........	20	68
Food and Products..................	4	12
Tobacco Products...................	0	0
Textiles and Products..............	2	5
Apparel and Products...............	2	5
Paper and Products.................	2	6
Chemicals and Products.............	4	16
Printing and Publishing............	1	2
Petroleum Products.................	0	0
Rubber and Plastics Products.......	6	19
Leather and Products...............	0	2
Durables Manufacturing.............	68	251
Lumber and Wood Products...........	5	22
Furniture and Fixtures.............	2	6
Stone, Clay, and Glass.............	2	8
Primary Metal Industries...........	6	21
Fabricated Metal Products..........	9	26
Nonelectrical Machinery............	15	63
Electrical Machinery...............	13	57
Transportation Equipment...........	12	32
Instruments and Parts..............	2	8
Miscellaneous Manufacturing........	2	9

Table 9
Employment Effects of a 20% Tariff on all Imported Goods--20% TARIFF
(Difference in thousands from CONTROL1085)

	1986	1987
Nonagricultural Establishments......	-100	-257
Contract Construction..............	-6	-21
Finance, Insurance & Real Estate...	-2	-10
Mining.............................	1	1
Transportation and Public Utilities	-5	-12
Services...........................	-7	-30
Wholesale and Retail Trade.........	-47	-156
Federal Government.................	0	0
State and Local Governments........	-3	-13
Manufacturing......................	-32	-18
Nondurables Manufacturing..........	-14	-12
Food and Products..................	-3	-14
Tobacco Products...................	0	0
Textiles and Products..............	-2	4
Apparel and Products...............	0	11
Paper and Products.................	-1	-2
Chemicals and Products.............	-3	-6
Printing and Publishing............	-1	-3
Petroleum Products.................	0	0
Rubber and Plastics Products.......	-6	-11
Leather and Products...............	2	10
Durables Manufacturing.............	-18	-5
Lumber and Wood Products...........	-2	-3
Furniture and Fixtures.............	-2	-2
Stone, Clay, and Glass.............	-2	-3
Primary Metal Industries...........	-7	-10
Fabricated Metal Products..........	-20	-33
Nonelectrical Machinery............	18	27
Electrical Machinery...............	26	52
Transportation Equipment...........	-30	-42
Instruments and Parts..............	2	5
Miscellaneous Manufacturing........	1	4

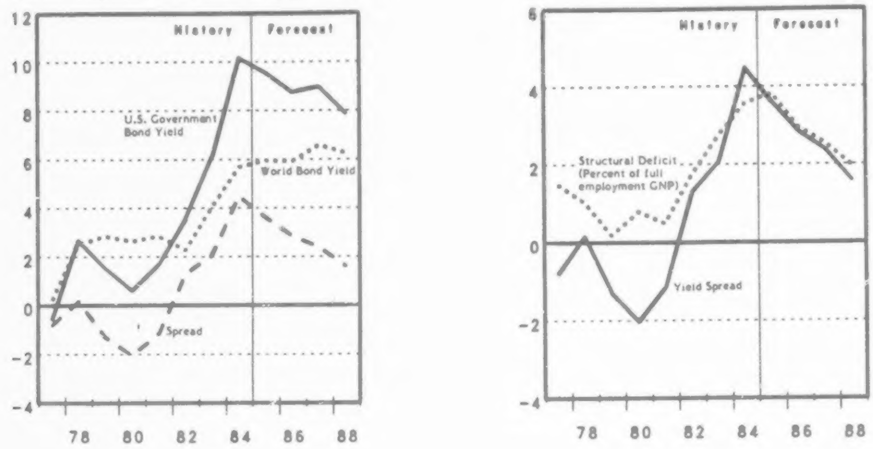
highlight the fact that restrictive overseas practices reduce U.S. living standards relative to the rest of the world. As a nation, it is desirable to have the dollar as strong as overseas markets will allow.

Table 10 summarizes the findings of the four special simulations. The Control falls toward the optimistic end of the range by assuming that much of the required adjustment of U.S. fiscal policy will occur and that the Federal Reserve will endeavor to keep interest rates lower than in 1984.

Table 10
Five Economic Futures
(Average growth rates or levels, 1986-87)

	Conflict	Control	Expand	Expand Plus	20% Tariff
Policy Assumptions					
U.S. Fiscal 1987 Budget (Billions of dollars)	No Deficit Restraint	Current Budget Resolution	Current Budget Resolution plus Tax and Spending Package	Same as "Expand"	Current Budget Resolution
Expenditures	1,109	1,037	1,023	1,022	1,049
Interest	169	150	146	147	942
Taxes	864	866	879	887	147
Deficit (NIA)	-245	-171	-144	-136	-106
Structural Deficit	-179	-103	-77	-76	-28
U.S. Monetary	Restrictive	Supportive	Expansionary	Same as "Expand"	Supportive
Reserve Growth	3.8%	5.9%	7.5%	7.5%	5.9%
10-Year Bond Rate	11.5%	9.5%	8.8%	8.8%	9.1%
M2 Growth	6.0%	7.2%	7.7%	7.9%	7.7%
Foreign Fiscal	No New Stimulus	No New Stimulus	Broad Tax Cuts	Same as "Expand"	No New Stimulus
Foreign Monetary	No Cooperation	Moderate Intervention	Heavier Intervention	Same as "Expand"	Moderate Intervention
10-Year Bond Rate	8.7%	9.3%	9.9%	9.9%	9.3%
Foreign Buying	Unchanged	Unchanged	Unchanged	Japan Expands Imports from U S. by $14 Billion in 1987	Unchanged
U.S. Economic Consequences					
Real GNP Growth (%, Q4 to Q4)					
1986	2.7	2.1	2.4	2.9	1.7
1987	1.8	4.3	5.0	5.1	3.9
Merchandise Trade Balance ($Bil.)					
1986	-137.9	-132.8	-134.1	-128.6	-79
1987	-126.0	-116.2	-112.9	-103.9	-49
Manufacturing Employment (%ch)	-0.2	1.3	2.0	2.5	1.3
Industrial Production (%ch)					
1986	2.7	1.3	1.6	2.4	1.0
1987	1.6	5.6	6.7	7.3	5.7
Inflation					
Consumer Prices	3.9	3.9	4.1	4.1	5.1
Wholesale Prices	1.4	2.7	3.4	3.5	5.4
Imported Goods	0.0	7.8	12.7	12.0	2.6
Exchange Rate Index (1980-2=1.00)					
Level	1.19	1.06	0.98	0.99	1.06
% Change	4.1	-6.3	-12.5	-11.7	-4.8

U.S. Federal Government Deficits Have Widened the Gap between Yields on U.S. Bonds and "Rest-of-World" Bonds.

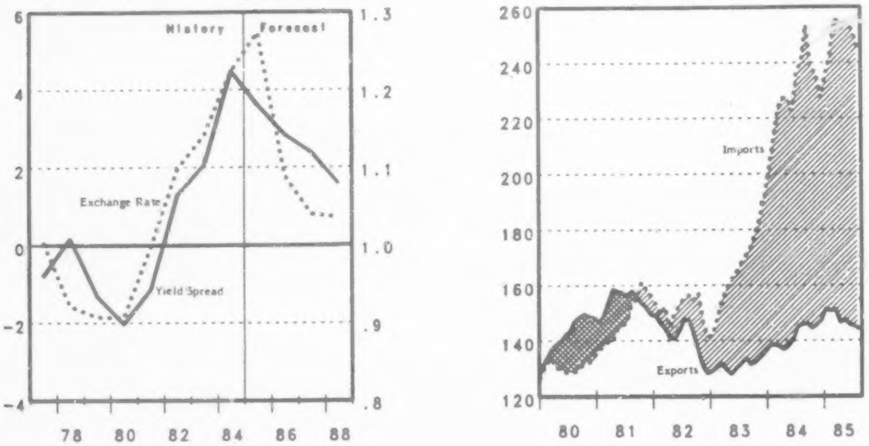


Inflation-Adjusted U.S. and World Bond Yields

The Role of the Federal Budget Deficit

Exchange Rate (Right scale) and Inflation-Adjusted Yield Spread (Left scale)

The U.S. Trade Balance in Manufactured Goods (Billions of dollars, annual rates 3-month moving averages, c.i.f. basis, SA)



October 22, 1985
Data Resources, Inc.

Senator **Quayle**. Let me ask Dr. Weidenbaum, on your second point on the remedies, you mentioned tax reform that would increase productivity. And you mentioned that Treasury II would probably work against some of those industries that are presently being affected most by imports. I presume you are talking about steel, auto, some of those basic industries?

Dr. **Weidenbaum**. The old-line, if you will, heavy, capital-intensive industries.

Senator **Quayle**. And from your viewpoint is that bad for the overall economy, or is it something that is good?

Dr. **Weidenbaum**. I think the timing is bad. I cannot think of a worse time to change the tax ground rules for the companies that are fighting imports. It is, in effect, putting them into a two-front war simultaneously.

Senator **Quayle**. OK, so the timing would be bad. But what about some of the specific suggestions. Let me ask this question. Is this the general direction that we ought to go in tax reform, the way Treasury II is phrased to get increased international competition?

Dr. **Weidenbaum**. I believe that a simpler, cleaner tax system ultimately would be more effective than the present one. But I must say I am concerned that reducing the investment incentives results in a lower rate of growth and more unemployment for a substantial period of time. This is where the scholar and the practitioner in me conflict. When you are talking about an ideal tax system, as the Treasury people often do, the effects of eliminating investment incentives will be insignificant 10 year from now. But that is a long time. As the theorists would put it, we will suffer the increased unemployment in only the first 5 years. That is when we will suffer the lower economic growth rate. Perhaps I worry about the short run more than they do.

I would not recommend to the Congress that it focus on tax reform with—as I see it—its short and intermediate-run negatives. I guess the most basic reason is that when I rank the key problems facing the United States—such as the tide of imports, the budget deficits, the debt problems, both agricultural, commercial and international—I have to dismiss tax reform as irrelevant.

Senator **Quayle**. Dr. Stein?

Dr. **Stein**. Well, I would not like you to have the impression that Dr. Weidenbaum and I agree on everything. I would say several things. In the first place, I do not think this tide of imports is a great problem for the United States. I do not think we have a big trade deficit problem. We have a situation in which we made certain decisions here in this country. We made decisions to expand investment by stimulative measures that were adopted in the 1981 Tax Act. We made a decision to increase defense expenditures, which I think was entirely necessary. We made a decision to try to stimulate consumption in this country, or at least that had the effect of stimulating consumption, by giving people big tax relief. The result is that we have a great demand for output in this country, a demand which has exceeded our production, and so we are drawing in imports from the rest of the world.

These imports from the rest of the world, as long as we have these other policies, are a boon to us, not a drag or an injury to us.

This has caused a certain readjustment in the location of output in the United States among industries. Industries in the tradable goods sectors have lost ground, relatively. But the economy as a whole is thriving.

So I would not approach this whole subject from the standpoint that we have a great import problem or a great trade deficit problem. I would not look at the question of balancing the budget as to any degree to be determined by the size of our trade deficit. I think there are reasons for wanting to reduce our budget deficit, but I do not think the trade deficit is one of them. And as far as tax reform is concerned, I do not think that this is a very high-priority objective, but I think it is a desirable objective, and it is not something we are likely to do every year. We do not reform the tax system very often. I think if this opportunity is not taken, it will not appear very soon again. And I do not think the short-term consequences that may flow from it are either very clear, and therefore not being very clear, are very serious. There are people who say that this tax bill will have a short-run stimulative effect on the economy, that the effect of reducing the burden on individuals, increasing disposable personal income, will outweigh the negative effect on investment in the short run, and I do not know where the balance of that lies.

I think if this is a good thing to do for the U.S. tax system—and I think it is, in general—we ought to do it and not worry about fine-tuning the detailed timing aspects of it.

Senator **Quayle**. Let me focus on this idea you have brought up, Dr. Stein. If I hear you correctly, you are saying that the trade deficit we have right now is not necessarily a significant problem to us. Am I reading you correctly?

Dr. **Stein**. Yes. I would say it is not a problem.

Senator **Quayle**. That it is not a problem. So therefore, in a time of prosperity, when the economy is moving forward, we should anticipate running a trade deficit from a model point of view?

Dr. **Stein**. Well, as long as we remain a country with a very low savings rate and a very attractive place to invest, we will have a trade deficit; as long as we remain a country with a high propensity to consume coffee, we will have a deficit in coffee. And there is nothing wrong with that.

Now, I do not think this is going to go on forever, because I believe that some steps will be taken to reduce the deficit so that our net savings will rise here. I think that other countries will take steps to make themselves more attractive as places for investment so that this situation will change; it will not go on forever. Very few things go on forever. But I do not think it is hurting us while it goes on.

Senator **Quayle**. So as long as we have this trade deficit right now, it is sort of a good thing, and we ought to keep it as long as we can—I mean, knowing that other forces are probably going to——

Dr. **Stein**. I do not think we have a choice of keeping it or not keeping it. I think if these other decisions are correct in their own terms, then the trade deficit is the proper and healthful—healthful and helpful—response to it.

Now, the budget deficit has certain consequences. It means that the stock of capital that is owned by Americans is not rising as rapidly as it would otherwise do, and so the income of Americans in the future will not rise as rapidly as it otherwise would. Now, if you are concerned about that, then you ought to reduce the budget deficit, and I think you ought to reduce the budget deficit for that reason.

But if we are not doing that, the fact that we have the trade deficit is really helping us, as I said earlier. It helps the American worker. We have an import of capital in the United States of $100 billion a year. That is capital that the American worker works with. It increases the productivity of the American worker. It decreases the productivity of the European and Japanese workers that this capital is flowing here.

You can remember, when capital was flowing out of the United States, how the AFL-CIO was up in arms because they said we are taking away the productive equipment with which the American worker works, and you are making him poorer than he would otherwise be. Well, it is going in the other direction now. The capital is coming to us.

Senator **Quayle**. Do the other two gentlemen agree with the basic proposition put forth that the trade deficit is basically a good thing for the American worker?

Dr. **Weidenbaum**. Not really. If it were a good thing, then if it were twice as big, it would be twice as good, and I cannot go along with that.

Dr. **Stein**. We have not proved that wrong, either.

Dr. **Weidenbaum**. Well, if my distinguished colleague on my left demonstrates that. . . . But seriously, as Dr. Stein points out, reducing the budget deficit is an important and desirable consideration on its own merit. Viewed in the context of this morning's hearing, I believe that—if we could reduce the budget deficit very substantially, we would have a healthier American economy. One important side effect of a smaller budget deficit would be a reduced trade deficit.

I believe the policy implications are clear. It is something that we need to do for our own domestic purposes. When you look at the key sectors of the American economy that are hard-hit—agriculture, for example—I am led back to the combination of the direct initial impact of a budget deficit and then the more indirect impact on the trade deficit. I do not think the trade deficit is benign. We now run a deficit in our trade of high-tech capital equipment, and I do worry about the long-term technological progress of the United States. I do not see our trade deficit as benign at all.

In my view, the point that comes out of all of our statements is there are many ways of dealing with the trade deficit that are far worse than the problem. That, I believe, is a great concern of most economists. Most of the so-called solutions we hear to the trade deficit would not only worsen international commercial relations, but more basically would be counterproductive in terms of the impact on production and employment in our domestic economy. That may explain the tendency of some economists to downplay the concern with the trade deficit: The fear that policy responses will bring on actions that are far worse.

Senator **Quayle**. Dr. Caton, do you have a comment on that?

Dr. **Caton**. I think my views are closer to those of Dr. Weidenbaum than to those of Dr. Stein. As I said earlier, in my view, the trade deficit is a symptom of another more underlying problem, hence there is a sense in which it is neither good nor bad.

Also, I am a little more concerned than Dr. Stein, about manifestations of that and other symptoms over the last year or so. And let me start from heresy, if you like, by saying that I do not hold the Federal deficit responsible for the 1980-1982 recession. Nor do I believe that the Federal deficit in any way reduced the speed of the recovery out of that recession. In fact, if anything, because of what it did for personal taxes and because of what it did for corporate taxes, it increased the speed of the recovery at least for a while. The turning point came some 12 months ago, when the economy suddenly slowed from growing at rates in excess of 8 percent per year to rates which are now closer to 2 percent per year.

And if we analyze the performance of the economy over the last year, we observe the following. We have seen no real improvement in the unemployment rate for a year; we have seen very, very small gains in industrial production, and we have seen a clear dichotomy between the service sector of this economy, which has continued to grow, providing some 3 million new jobs in the past 12 months, and the manufacturing sector of the economy, where employment has in fact been falling for some 8 months.

Now, there is nothing magical about the manufacturing sector. There is no reason for us to prop it up in perpetuity. But there is also no reason for us to conduct bad policy, which has the implication that we finish up with a smaller manufacturing sector than we otherwise would.

And in the past 12 months, I see a clear link from the deficit through the exchange rate to a twist in the economy, that is, that we have continued to import more goods. And while it may be true that the rate of increase of imports over the last year has not been much greater than in the year before, it is also the case that imports really did not fall all that much during the recession, and that is very unusual. So we were starting from a high base.

So I see at least considerable damage, but I do not disagree that the thing you have to do to bring the exchange rate down is to—well, that one should wish to fix the deficit for other reasons, and that one of the consequences of fixing the Federal deficit will be that the exchange rate will come down, and the trade problem will certainly be considerably mitigated when that happens.

Senator **Quayle**. Senator Simon?

Senator **Simon**. Thank you.

This is "Pick on Herb Stein day" here, Dr. Stein.

Dr. **Stein**. OK.

Senator **Simon**. I have to confess I was a little bit startled as I read through your statement. I came to almost the same conclusion Dr. Weidenbaum did, that if we just doubled the imports, the economy would really be flourishing.

In all this rosy reporting about what is happening, my State of Illinois between 1979 and 1984 lost 286,100 jobs, manufacturing jobs, according to the Department of Commerce. And Dr. Caton's remarks, I think, are important. We have to continue to have these manufacturing jobs. Just to say we are going to shift to a service-oriented society—it does not maintain the standard of living, I do not think. Maybe here, I am discussing with economists something they more know about than I. But I cannot eat information. I cannot sit on information. I cannot drive information.

I think the United States has to continue to produce high quality, concrete things; otherwise, I think we are going to inevitably suffer substantial losses in income. And when you say, Dr. Stein, that this $123-billion trade deficit last year has helped the American worker, my friends at Caterpillar would have a hard time buying that.

I know you want to respond.

Dr. **Stein**. I do, yes. Well, first, we are at a disadvantage here, because there are nine States in which employment has declined between 1980 and 1985, and you two represent two of them. So there are 39 other States, and 78 Senators, I guess—no; I go back to the time when there were 48 States, my goodness—but anyway, you know what I am talking about. So, it may not be true that what is good for the country is good for Peoria, but the country as a whole has benefited from this.

All I am saying, really, is that given the policies we followed, we were much better off to have lived in an open economy where we could import capital and goods than if we had lived in a closed world. Suppose in 1981, we had taken the steps we did, and there was no outside world to sell goods to us; what would have happened? We would have had a big decline in consumption in the United States, because we were funneling more of our resources into defense and into investment.

So that is the sense in which I think we have benefited from all this, and I think the American worker benefits from a high level of investment. We would not have had the high level of investment in this country in the last 5 years given the budget deficit if we had not had the trade deficit and the import of capital. So in that sense, the American worker has benefited.

The American workers' incomes are higher than they have ever been. Employment is higher than it has ever been. Employment as a percentage of the population over 16 is higher than it has ever been. Now, there have been certain dislocations, certain shifts in output and in the industrial composition of output. Much of this has nothing to do with foreign trade. At the meeting I attended yesterday, there was a man who was an expert on the steel industry. They asked him about the impact of foreign trade on steel in Pittsburgh. He said Pittsburgh will never produce any steel anymore, regardless of foreign competition. Pittsburgh is just not a place where one will produce steel in the United States in the future. And I do not know about tractors.

But shifts go on in the American economy. People move, industries move. The shift of employment and output out of the tier of States that runs from New York through Illinois, was going on before we slipped into this trade deficit position. So you cannot blame all those shifts on the trade position.

Senator **Simon**. I am not suggesting that we blame everything on trade. I guess I am concerned by that deficit. I am concerned by another statistic—and there are a variety of statistics that you can provide that are not quite as rosy as those we have been given here this morning—one of them being that a declining percentage of Americans now own their own homes for the first time since the Depression era. That, I do not regard as a healthy statistic. And I do not think it is totally unrelated to that import situation. That is really why I think we have to grapple more successfully with the trade question.

Just a few fast questions here, Mr. Chairman. One is, in your statement, Dr. Stein, you say, "The net imports of goods and services are exactly matched by an import of capital." I am not an economist. Is that Stein's law, or is that a universally-accepted——

Dr. STEIN. That is a matter of definition, yes. That is not my invention.

Senator SIMON. OK.

Dr. Weidenbaum, you say among other things, "About one-half of our trade deficit with Japan could be eliminated if Congress rescinded the bans on the exports of timber and oil."

Is that literally true?

Dr. WEIDENBAUM. There are studies showing that—and these are estimates—our ban on timber reduces our prospective exports to Japan by $1 to $2 billion. The ban on exporting oil from the North Slope of Alaska results in, about an $18- to $20-billion loss in prospective exports.

What is so ironic is that both of these permanent pieces of legislation were enacted to deal with essentially short-term problems. In lumber, of course, the construction companies at the time were trying to prevent a run-up in the costs of one of their major inputs, but of course, the timber industries in the Northwest are in very sad shape today; they could use some extra business. And the ban on oil exports from Alaska was voted during the period of the oil crisis rather than the oil glut that we are experiencing today.

And what is fascinating is that we could reduce our trade deficit with Japan by at least half—I did not say our overall trade deficit, by the way, because oil is fungible and all that—but we could reduce our trade deficit with Japan, which is such a pressure point, to a greater extent by these two actions, which are unilateral on our part, than if they opened up their economy.

So we are responsible for at least as much of the problem as they are. So much for Japan bashing.

Senator SIMON. I am going to do some follow through on that, as it is an intriguing statistic.

Your myth No. 4, "Workers in import-affected industries deserve to be treated more generously than other employees." I guess I would buy that if we would say—and you use the defense analogy—I guess my answer would be we ought to be having training programs for defense industries, for import-affected industries, for all industries where people find themselves out of work; that it is not rational for us to—we, in a sense, guide policy because of fear of unemployment a lot of people have in some of these things, defense being a good illustration.

Do we differ?

Dr. WEIDENBAUM. Not fundamentally, because my point was we should not have different training programs for the impact of trade or for the impact of defense, but rely on general-purpose programs.

As an educator, I am all for education and training. However, drawing on my recent Government experience, I could not give very high marks to the actual programs of adjustment that the Federal Government has been financing. That is not an expression of opposition to the whole effort but just a reminder to the Senate that in voting for programs of worker training, it is not just the motive that is important. I believe you have to be very hard-nosed about evaluating these programs for their effectiveness. You find disappointing results when you perform this analysis. From my recollection, employer-provided, on-the-job training often is a more effective route, albeit subsidized by Government, than the Government-operated job training programs.

Senator SIMON. Let me ask one final question, since all of you touched on the deficit problem and its relation to all of this. We face in this country today really three suggestions for a constitutional amendment to require a balanced budget. One is a convention called by the States, the first one in the history of our Nation since the original Constitutional Convention. The second is a proposal that we balance the budget and tie it into a percentage of the GNP for Government expenditures, a somewhat complex formula. The third is a relatively simple constitutional amendment which says expenditures and receipts have to balance unless there is a three-fifth vote of Congress to the contrary.

Dr. WEIDENBAUM. Unless there is what?

Senator SIMON. You have to have a balanced budget unless there is a three-fifths vote of Congress to the contrary.

My question to each of you is would you vote for any of these, or if you were to support one of these three options, which one would you favor?

Dr. Caton, since I have not imposed on you, I will hit you first.

Dr. CATON. I think I would vote for none of them, for two reasons. First of all, I do not vote in this country; and second, that it seems to me they all buck the issue, or basically, that they are not workable as they stand. They require one to be able to see the year ahead with perfect foresight, and somebody still has to make the decisions, the hard decisions, as to which programs will be cut, where taxes will be increased. It is the same people presumably who will be trying to make those decisions who seem incapable of making them now. So I question seriously the workability of any of these amendments. However, I bow to the far greater experience of both of my colleagues in, shall we say, the field of political economy.

Senator SIMON. If I could just add, we have shown an unwillingness to put these things into order, and we have attempted now, with the Gramm-Rudman proposal, to move in that direction, but it is statutory and Dan Quayle and Paul Simon could introduce a bill tomorrow saying, "Notwithstanding any other provisions of law, we ought to spend $10 billion in Indiana and Illinois for special programs," so that it does not really get us much backbone to force us to make the tough decisions.

Dr. Weidenbaum?

Dr. WEIDENBAUM. I am not terribly enamored with any of these constitutional or straightjacket approaches, including Phil Gramm's latest. Nevertheless, I have became more and more sympathetic to the idea that—and there is enough blame to go along both ends of Pennsylvania Avenue, so I am not singling out Congress or the White House, or excluding either—the budget process does not seem to work effectively. In the last half-decade, we have seen a rising share of the GNP devoted to Federal spending, despite all sorts of heroic efforts to cut the budget. Well, if the two branches responsible cannot do it under the existing institutional structure, I guess we have to try another institutional structure.

I hesitate to experiment with the Constitution, which is maybe why I am leaning personally toward the Gramm-Rudman approach—although the deeper I dig into the details, the greater qualms I have.

I once said with tongue in cheek that maybe I ought to be a great proponent of these straightjacket approaches, given the fact I grew up in the old Budget Bureau. The first thing I would do is take a leave of absence from the university, move back to Washington and set up a consulting firm specializing in finding ways to get around the constitutional amendment. I think I would do a land-office business.

Senator **Simon**. Dr. Stein?

Dr. **Stein**. I would not vote for any of these amendments, and I am not or Gramm-Rudman. I do not think Congress is hopeless. I think it has fairly accurately reflected the wishes of the country. I do not think that balancing the budget is the ideal goal of fiscal policy. I think there are a lot of things that are worse than budget deficits, and I am afraid, particularly in the case of Gramm-Rudman, that we would get something worse. I think we would get an arbitrary cut in the defense budget, which I think would be very undesirable, and that would be a serious consequence of it.

So I am against all of this.

Senator **Simon**. Thank you.

Senator **Quayle**. Thank you, Senator Simon.

I have one final question of the panel. There has been some talk that perhaps a consensus piece of legislation that may emerge on the issue of trade will deal with giving the President specific retaliatory powers and less discretion not to use them, when you find subsidies, and when you find trade barriers with other countries. In other words, once this determination is made, say, by the ITC or something like that, that the discretionary powers of the President to ignore or comply with that and how he is going to do it is some genesis of an idea that is percolating around here.

I wonder if you have any general comments about that type of approach that the Congress may take in the overall trade area?

Dr. **Stein**. Well, I am not a student of that. I was impressed by what Secretary Brock said earlier, that the President has plenty of authority. I think this is a very complicated responsibility in which the criteria, the triggers, can never be quite objectively stated, and in which there are always international political considerations that need to be taken into account, I would not want to limit the President further in the exercise of the authority that he has.

Senator **Quayle**. Dr. Weidenbaum?

Dr. **Weidenbaum**. I would urge against that approach because it is so one-sided. It ignores all the barriers that we, intentionally or unintentionally, have set up over the years against the exports from other countries. We would retaliate against their barriers while we ignore our barriers. They are really the ingredients for a trade war. We should not forget we are still the world's largest exporter. We have a lot at stake.

Furthermore, a lot of those imports are vital to the American economy. Just to cite a few, bauxite is the basis for our aluminum industry and all the products using aluminum—not to mention the whole array of strategic minerals and metals on which so much of our industry and defense rest. And a lot of those imports—bananas are a good example—underscore the point about comparative advantage. It does not make sense just to raise our own bananas. We could do it in hothouses, but it would require a tremendous subsidy from the Federal Government. Encouraging a trade war would just be irresponsible.

I will add a P.S. When so many of these actions are aimed at the countries that are struggling to pay the interest, much less the principal on their debts to the U.S. banks and we dam up foreign trade, which is the way they can earn the foreign exchange to pay their debts to us, we are just inviting trouble.

Again, in my view, if there is anything that the three of us appear to agree on, it is that we must deal with the budget deficit. Remember, Herb constantly is saying if we are going to run this kind of a budget deficit, a trade deficit is benign, et cetera. He stated it very technically and very accurately. But I think we need to pull out that "if." We do not need—we should not run—such a big budget deficit. And that is the fundamental and benign approach to the trade problems that do beset our economy.

Senator QUAYLE. Dr. Caton?

Dr. CATON. I think the issue really comes down to this. Getting our trading partners to engage in fairer trade in any way is clearly an act in which great diplomacy is required. I do not think that great diplomacy is enhanced by rigidity, but rather by flexibility. So I also would vote against tying the President's hands in these matters.

Let me add one more concern—well, let me add one more comment on the Federal deficit/trade deficit issue. That is, I firmly believe, and clearly my colleagues do, that we should fix the Federal deficit. That is the No. 1 objective. However, that may not be enough. I believe—and presumably, most people believe—that the exchange rate will be lower 5 years from now than it is now, measured against our trading partners' currencies. So there is a sense in which the exchange rate is temporarily high. There is a sense therefore in which certain industries are temporarily uncompetitive because of the high value of the dollar, but it is an unfortunate fact that industries that are temporarily uncompetitive may indeed go permanently out of existence. And that, I think, is the major reason why one should be paying any attention at all to any matters other than the Federal deficit at this time.

Senator QUAYLE. Gentlemen, thank you all very much for a very comprehensive and well-thought-out presentation.

The subcommittee will meet again on October 31 at 10 a.m. here on the impact of trade on the industries of steel and agriculture.

We are adjourned.

[Whereupon, at 12 p.m., the subcommittee was adjourned.]

IMPACT OF TRADE ON EMPLOYMENT

THURSDAY, OCTOBER 31, 1985

U.S. Senate,
Subcommittee on Employment and Productivity,
Committee on Labor and Human Resources,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m. in room 430 Dirksen Senate Office Building, Senator Dan Quayle presiding.

Present: Senators Quayle, Simon, and Pell.

OPENING STATEMENT OF SENATOR QUAYLE

Senator **Quayle**. The committee will come to order.

Today the Subcommittee on Employment and Productivity begins the second in a series of hearings designed to assess the impact of international trade on domestic employment.

We are devoting today's hearing to a study of the complicated role that international trade plays in affecting the economic health and employment levels of both the U.S. agricultural sector and domestic steel industries.

Coming from the State of Indiana, these two industries are of critical importance to me and to our State. I would imagine during the testimony that we will hear some sort of diverse testimony on how we can best approach our trade policies. I think that getting the witnesses together and to get a full and comprehensive understanding of this sensitive issue is most important.

In my home State of Indiana, we are now the largest steel producing State in the country, and in agriculture we are 10th overall. Together these two industries directly employ over 80,000 farmers and some 42,000 steelworkers in Indiana alone.

Nationwide, the steel industry continues to employ over 235,000, and the agricultural complex, including its production, input, transportation and marketing sectors, is our Nation's largest industry, employing over 20 million people.

Unfortunately, particularly in the steel industry, we have seen a dramatic decline in jobs. Just in Indiana alone, we have seen a decrease from 65,200 in 1980 to 42,400 in August of this year. The number of farmers has steadily decreased as well, both nationwide and in Indiana.

As we look at this issue of imports, we also have to be very sensitive to the exports. My State of Indiana is a large exporter; we export about 35 percent of our farm commodities; 90,000 jobs in the State of Indiana are directly tied to exports, so exports are very important.

Now we have this loss of jobs and some industries are in a transition. What we have to do is make sure that our workers who are dislocated, through no fault of their own, do receive some training and retraining and help through adjustment programs which I think are absolutely essential. The Job Training Partnership Act, I think, is moving in this direction and is certainly helpful to soften the blow to many people that have been unduly dislocated.

I think some of the themes that I will be exploring with our witnesses will be as follows: One, I would hope that we might direct ourselves to look at the GATT agreement and to see if it, in fact, properly defines what fair free trade is. Is it sufficient to meet the current complexities we are finding in international trade?

Second, I think we ought to discuss some of the barriers that we find to our exports. There is now a publication that is going to be available that specifically defines barriers to our exports.

Three, I think we have to look and see what is a subsidy and what is unfair trade. We need to look at that issue to try to define and to ferret out where we have unfair trade and where we basically have competition. There's nothing wrong with competition, but there is a lot wrong with unfair and illicit trade.

And, finally, anything that we can do along the lines of helping our dislocated workers in moving from a place of unemployment to a place of employment.

So those are some of the themes and the questions that we will be asking our witnesses.

OPENING STATEMENT BY SENATOR PELL

Senator **Pell**. Mr. Chairman, I would like to commend you for holding hearings to study the impact of international trade on employment in the United States. I believe the relationship between unemployment and foreign trade and competition have received far too little study and I believe we must focus our attention on that relationship.

The effects international trade and foreign competition have had on the U.S economy are complex and I do not believe there is one clear and simple resolution to the problems created by these two forces. unfortunately, I believe that we were not ready and are not ready to respond in a comprehensive manner to the problems created by international trade and foreign competition.

Today's hearing, I understand, will address two specific industries, agriculture and steel. Although the problems suffered by these two industries as a result of foreign trade and competition are significant, the direct impact of these two industries in my own State has not been as severe as the impact in the chairman's State of Indiana.

That is not to say that my own State has not suffered as a result of the United States inability to deal with the crises resulting from the enormous trade deficit. Although unemployment is relatively low in Rhode Island, certain industries like the textile, apparel, and shoe industries have suffered greatly. For example, foreign textile and apparel industries control more than 50 percent of the U.S. textile and apparel market. From March 1979 to December 1982 there was a loss of over 184,000 jobs in the textile industry, and over the same time period, a loss of 170,000 jobs in the apparel industry.

I believe we must respond, in some way, to not only the loss of jobs in these industries but also the potential loss of these industries. I believe it would be wrong for us to allow our economy to become a nonproductive, service industry economy. To maintain a strong economy we must have a balance of productive and nonproductive economies. Therefore, I look forward to hearing the testimony of our witnesses today, and I look forward to working with you in the future to determine what we can do as members of this committee to have an impact in this arena.

Senator **Quayle**. Our leadoff witness today is Dr. Robert Thompson, who is Assistant U.S. Secretary of Agriculture for Economics. And he was a professor of agricultural economics at the fine university, Purdue University, since 1974, so he is no stranger to me or no stranger to this committee, and particularly to those of us from Indiana.

We appreciate your coming forward today. We are appreciative of your hard work and what you are trying to do at the Department of Agriculture. You come from a good background, if I might be so modest as to say. Also, I might just add that Senator Simon will be coming. People have informed me that he will be a little bit late but will be attending these hearings.

So, Dr. Thompson, if you would like to proceed, your full statement will be put in the record in its entirety, and you can summarize or proceed as you see fit.

Dr. Thompson, welcome.

STATEMENT OF ROBERT L. THOMPSON, ASSISTANT U.S. SECRETARY OF AGRICULTURE FOR ECONOMICS

Mr. **Thompson**. Thank you very much, Senator Quayle.

Mr. Chairman and members of the subcommittee, I appreciate this opportunity to appear before you to discuss the impact of international trade on U.S. agriculture, and I salute your initiative in studying this complex global issue confronting our farm exports today.

As one of the largest sectors of the U.S. economy, America's food and fiber system accounts for nearly 20 percent of the Nation's gross national product. This system includes much more than farms.

It takes in virtually all the activities involved in moving food and fiber from the farm to the dinner table or the clothes closet, or on board ship for exports. Farm supply stores, machinery dealers, fertilizer distributors, input manufacturing plants and phosphate mines, to name a few, all are part of this global system known as agriculture.

We are the world's leading exporter of farm products. The United States dominates trade in temperate zone crops and accounts for nearly half of world grain trade. Obviously, these exports are important to U.S. agriculture.

The 20 percent of gross farm sales are generated by the export market. Each dollar earned from farm exports generates more than $1.35 of output in the rest of the American economy. Approximately 80 percent of this additional economic activity accrues to the nonfarm sector.

The U.S. economy has an important stake in a healthy agricultural trade sector. In calendar year 1984, 1.1 million domestic jobs were traceable to U.S. farm exports valued at almost $38 billion. Of these, around 500,000 farm jobs, 16 percent of the farm labor force, could be considered as producing for exports.

In addition, more than 630,000 jobs in the nonfarm sector were related to assembling, processing, and distributing farm products for the export market. About 60,000 were in food processing, 250,000 in trade and transportation, 120,000 in other manufacturing sectors, and 200,000 in other services.

During the same year, we imported competitive agricultural products valued at about $12.5 billion which if produced domestically would have accounted for another 400,000 jobs.

It is important to the world economy that the world market continues to operate smoothly. Many of the major trading countries, including the United States, are drifting toward agricultural protectionism as an alternative to making costly adjustments in their own domestic farm economies. Any acceleration of this tendency in the coming year could further weaken U.S. agricultural exports

Overall employment is influenced more by the volume of production and exports in agriculture than by their value. In 1979, 4.4 billion bushels of corn, wheat and soybeans were exported. Currently, we are projecting 3.5 billion bushels of exports this year.

This 900 million bushel decline in exports requires 90,000 fewer nonfarm workers to support bulk agricultural exports. A drop in exports without a corresponding drop in production has meant that the domestic economy has had to absorb a greater share of the production. This lowers prices of farm products and has resulted in greater accumulation of Government stocks.

This season, the price of wheat was down 14 percent from 1980's record and the price of soybeans was down 23 percent. Further price declines are expected in the 1985-86 season, as well.

For the farm sector, exports influence prices and incomes even more than employment. Around 60 percent of United States farm exports are of unprocessed grains, soybeans and cotton. Production of these commodities uses more land than labor.

Thus, about 1 in 3 acres of cropland is used for exports and about $1 in $5 of farm production are for the export market, but only about 1 in 6 jobs in farming are related to exports. Therefore, the employment stake in a healthy agricultural trade is probably more important to farm-related businesses and to rural communities which rely on a healthy farm sector.

Now, in my formal testimony, I review the conditions of the 1970's which led to the very rapid expansion in farm exports, and then I go on to address how these conditions changed as we came into the 1980's. But, in general, I focus, in the formal testimony, on a number of macroeconomic forces, expansion of Federal budget deficits, putting upward pressure on interest rates, attracting net capital inflows from other countries into the United States and putting upward pressure on exchange rates, and how this has worked to increasingly price United States farm exports out of the export market and lower the price of imports of agricultural products as well as other products in direct competition with domestic production.

In addition, I address the extent to which the rigid price supports in the 1981 farm bill have, in effect, become price supports for the whole world market and have worked to price us out of the export market. When global supply and demand conditions mandate that prices should fall below our loan rate, our farmers find it more profitable to sell to the Government than to export. They put their commodities under loan. When these stocks accumulate to burdensome levels, we have acreage reduction programs. When stocks have gotten extreme, we have gone to a large acreage reduction program such as the PIC Program; This has meant that we have played the Saudi Arabia role in the world wheat market of doing all the adjusting of supply to support the world wheat price at our loan rate, just as Saudi Arabia has done to support the global price of petroleum in the OPEC oil cartel.

Now, what are the components of a cure to the problems that we are presently confronting in substantially weaker farm exports and expanded agricultural imports? How do we restore a thriving export market? How do we bring more workers back to work in the input industries and export-related jobs? How do we stem the tide of farmers who have to leave the farm for off-farm employment?

I conclude there are two key components to such a cure and the administration is presently striving to achieve both. One is the essential move toward a more market-oriented agriculture. The other is maintenance of a stable economic policy with small budget deficits at most.

With greater market orientation, which the administration hopes will be the result of this year's farm bill debate, U.S. products will begin to regain their competitiveness in the world markets.

I cannot state strongly enough my personal belief that a return to sound economic health for American agriculture requires a greater market orientation. Further, I believe a reduction in the Federal deficit is the single most important legislative initiative for farmers this decade.

Farmers have paid dearly for the growing deficit through export loss and depressed commodity prices and higher cost of borrowing. When we borrow abroad to satisfy public and private credit demands, the exchange rate goes up and the farmer is the loser.

The fundamental ability of American agriculture to compete in world trade is being masked by farm and economic policies that support our prices above world market clearing levels and keep exchange rates high. We tend to look for new and better Band-Aids to deal with the symptoms of the problem.

I strongly urge that we go for a cure, instead, through deficit reduction and a needed new dynamic farm policy for American agriculture.

Thank you, Mr. Chairman. That concludes my formal testimony. I will be glad to answer any questions you may have.

Senator QUAYLE. Thank you, Dr. Thompson.

[The prepared statement of Mr. Thompson follows:]

Testimony
of
ROBERT L. THOMPSON
Assistant Secretary for Economics
U.S. Department of Agriculture
before the
Subcommittee on Employment and Productivity
of the
Labor and Human Resources Committee
U.S. Senate
October 31, 1985

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to appear before you to discuss the impact of international trade on U.S. agriculture. I salute the initiative shown by this body in studying the complex global issues confronting our farm exports today.

As one of the largest sectors in the U.S. economy, America's food and fiber system accounts for nearly 20 percent of the Nation's gross national product. This system includes much more than farms; it takes in virtually all the activities involved in moving food and fiber from the farm to the dinner table, or the clothes closet, or on board ship for export. Farm supply stores, machinery dealers, fertilizer distributors, input manufacturing plants, and phosphate mines, to name a few, all are part of the system known as American agriculture.

Global Economic Impacts

The farm economy is so well integrated into the national economy that conditions on Wall Street and in financial districts the world over often affect agriculture's health as much as farm programs and weather. With today's globally interdependent agriculture, international business cycles have a major impact upon the Nation's farmers as well, especially as they affect exports of U.S. agricultural products. National and international economic forces, good or bad, exert a major influence on our farmers' production costs, on the demand for their products, on their competitiveness in world and U.S. markets, and ultimately on their income levels and their financial well-being.

We are the world's leading exporter of agricultural products. The United States dominates trade in temperate-zone crops, and accounts for nearly half of world grain trade. Obviously, these exports are important to U.S. agriculture: 20 percent of gross farm sales are generated by the export market. Each dollar earned from agricultural exports generates more than $1.35 of output in the U.S. economy. Approximately 80 percent of this additional economic activity accrues to the nonfarm sector.

Employment and Agricultural Trade

The U.S. economy has an important stake in a healthy agricultural trade sector. In calendar 1984, 1.1 million domestic jobs were traceable to U.S.agricultural exports, valued at $37.9 billion. Of these, around 500,000 farm jobs--16 percent of the farm labor force--could be considered as producing for export.

In addition, more than 630,000 jobs in the nonfarm sector were related to assembling, processing, and distributing agricultural products for export. About 60,000 were in food processing, 250,000 in trade and transportation, 120,000 in other manufacturing sectors, and 200,000 in other services. During the same year, we imported competitive agricultural products valued at $12.5 billion which, if produced domestically, would have accounted for 400,000 jobs--150,000 on the farm and 250,000 off the farm.

It is important to the world economy that the world market continues to operate smoothly. Many of the major trading countries are drifting toward agricultural protectionism as an alternative to making costly adjustments in their own domestic farm economies. Any acceleration of this tendency in the coming year could further weaken U.S. export prospects.

Equally important, protectionism in the United States also is on the rise. A move toward limiting foreign access to U.S. markets for non-farm products could weaken our agricultural exports even further as our trading partners retaliate by limiting imports of U.S. food, feed, and fiber. Much of the cost of closing U.S. markets to foreign products would be borne by our farm sector; but with the close ties between the farm sector and the rest of the economy, the nonfarm employment effects ultimately would exceed the farm sector effects.

Volume Greater Influence Than Value

Overall employment is influenced more by the volume of production and exports than by value. The 1979 crop year was the peak for volume exported of corn and cotton; the 1981 crop year was the peak for wheat and soybeans.

In 1979, 4.4 billion bushels of corn, wheat and soybeans were exported. Current projections are for 3.5 billion bushels of exports this crop year. This 900-million-bushel decline in exports requires 90,000 fewer nonfarm workers to support bulk agricultural exports. A drop in exports without a corresponding drop in production, means that the domestic economy must absorb a greater share of production. This results in lower prices for agricultural commodities, greater accumulations of Government stocks--all the time farm income is dropping. This season, the price of wheat was down 14 percent from 1980's record, and the price of soybeans was down 23 percent. Further price declines are expected in the 1985/86 season as well.

For the farm sector itself, exports influence prices and incomes more than employment. Around 60 percent of U.S. agricultural exports are of unprocessed grains, soybeans, and cotton. Production of these commodities uses land more than labor. Thus, about 1-in-3 acres of cropland is used for exports, and $1-in-$5 of farm production are for the export market, but only about 1-in-6 jobs in farming are related to exports. Therefore, the employment stake in a healthy agricultural trade is probably more important to farm-related businesses and to rural communities which rely on a healthy farm sector.

The 'Boom' Years of the 1970's

To understand today's situation, we need to look at the so-called "boom" years of the 1970's when U.S. agriculture saw tremendous--if abnormal--rates of growth. Soaring farm exports grew five-fold to a record $44 billion in fiscal 1981. Farmers planted fence-row to fence-row, and bankers gladly helped finance the expansion. An additional 55 million acres of U.S. cropland came into production, average yields increased by 30 percent, and hundreds of millions of dollars spent on machinery and equipment appeared to herald a new era of financial security for rural America. The annual level of capital expenditures in agriculture nearly doubled from $10 billion in the early 1970's to $19 billion (in current dollars) at the peak of the boom in 1977-81.

Rising farm incomes paid for some of this investment, but farmers financed the bulk by borrowing. Farm debt rose from about $50 billion in 1970 to $130 billion in 1980 and reached $212 billion in 1985. In 1984, the $22 billion paid in interest by farmers ranked as the largest cash cost of farm production.

Financial conditions in the 1970's assuredly offered a powerful rationale for buying real assets such as farmland. Farmers and others eagerly sought farmland as a hedge against inflation, and--for awhile--they weren't disappointed. The average value of farmland increased by more than 13 percent annually during the 1970's. Although nominal interest rates were on the rise, real interest rates were low and even negative at times. And the presence of price support programs reduced the risk of producing farm products, reinforcing demand for farmland. This was especially the case in the second half of the decade when support prices for farm commodities increased in step with rapidly rising farm costs.

Backdrop of Optimism

It was against that backdrop of tremendous optimism that the 1981 Farm Bill was written. With expectations of continuing rapid inflation and ever-increasing world demand, price supports were set at relatively high and rigid levels. But almost overnight, world recession slowed the growth in demand for farm products, halting the incredible gains in trade. Aggressive expansion in productive capacity and in debt in the 1970's left farmers unprotected from the sweeping economic changes that came with the new decade. Many of the macroeconomic, weather, and policy forces that strengthened markets in the 1970's now worked in reverse.

As the value of the dollar rose, the competitive position of the American farmers weakened on the world market, and other countries expanded their agricultural output. The appreciating dollar combined with rigid price supports legislated in the 1981 bill to effectively price many U.S. products out of world markets and encourage expansion in competing exporting nations.

Declining Exports, Increased Production

Almost 80 percent of the decline in the U.S. trade balance from 1981-84 was due to increased imports, including agricultural imports. Declining exports, including those for agriculture, added to the problem. In fiscal 1984, agricultural exports were $38 billion, just over 22 percent of total U.S. exports. In fiscal 1985, the expected value of agricultural exports is $32 billion--27 percent below the 1981 peak of $44 billion. The overall U.S. trade deficit--projected at $125-$130 billion--simply overwhelms an expected agricultural trade surplus of about $12 billion.

In terms of volume, exports have declined 35 million tons during the past 5 years, a 21-percent drop. For fiscal 1985 alone, volume was down one-tenth from the previous year. Yet, despite the sharp drop in trade, U.S. farm output has continued to grow in the 1980's despite virtually stagnant demand for the past 3 to 4 years. Farmers have made use of the capacity built up during the 1970's, but more in response to Government price supports rather than to market signals. This continuing imbalance between productive capacity and demand is a major cause of today's financial problems in agriculture. Expanding production and declining exports have led to low commodity prices and substantial excess capacity on farms, in the farm input industry, and in the export market channels. This has pushed some farmers out of agriculture, and has reduced employment linked with exports.

Reponses to Inflation

The strong dollar can be traced to the outburst of inflation in the late 1970's that led many nations to redirect their economic policies. The United States responded to the second oil price shock of 1979, not by expanding the money supply as we did after the 1973 oil crisis, but by curbing growth in the money supply. Inflation was brought under control beginning in 1981 but the world economy slipped into a recession, causing world trade to shrink. Because demand for many U.S. agricultural exports is very responsive to changes in foreign income levels, the global recession took its toll on our farm exports. This downward pressure on exports was reinforced by the increased protectionism and predatory trade practices that usually accompany a recession.

Real U.S. interest rates rose sharply, partly because of tighter money and partly because the Government borrowed heavily to finance the rapidly growing Federal budget deficit, aided little by low private U.S. savings rates. As inflation subsided, real interest rates reached post-war records. These high, real interest rates coupled with large Federal deficits, the belief that the United States provides a safe haven for investments, and a strong U.S. economy led to strong net capital inflows and dramatic increases in the value of the dollar.

Recently, expansionary monetary policy has reduced interest rates. But, along with the growth in private sector debt which usually accompanies a business upswing, the growth in Federal Government debt has kept interest rates at historically high levels.

However, because we live in a world of floating exchange rates, overall international payments must balance. A net capital inflow must be offset by an equal current account deficit. A larger net capital inflow forces exchange rates up until imports expand or exports fall sufficiently to maintain balance in international payments. Thus, the appreciation of the U.S. dollar in the 1980's has substantially raised the price of all U.S. exports, even as internal U.S. market prices have fallen. This has encouraged foreign competitors to expand their exports.

Third World Debt

Third World debt also has further reduced U.S. agricultural exports to developing countries, our fastest growing market in the 1970's. Abundant credit was available at low or even negative real interest rates to developing country borrowers. Many borrowed internationally, not only for investment projects which could generate future foreign exchange revenues to repay the loans with interest, but also for consumption, including food. By the beginning of this decade, many Third World countries were loaded up with loans often denominated in dollars, bearing variable interest rates.

As real interest rates have risen to very high levels by historical standards, the debtor countries have seen their debt service payments rise to absorb substantial fractions of their foreign exchange earnings. Imports have fallen. The world recession and rise in protectionism have depressed developing countries' exports and their ability to earn foreign exchange to buy imports and pay off their debt.

Mr. Chairman, I realize that examination of the macroeconomic forces behind the loss of exports for U.S. agriculture can be a bit academic; however, we cannot appreciate the current state of the farm economy without an awareness of these forces. But where do we go from here? What do we do to restore a thriving export market for U.S. farm products? To bring more workers back to the input industries and export related jobs? To stem the tide of farmers having to leave the farm for off-farm employment?

Components of a 'Cure'

There are two key components to a "cure," if you will, and the Administration presently is striving to achieve both. One is the essential move toward a more market-oriented agriculture; the other is maintenance of stable economic policy with small budget deficits, at most. With greater market-orientation, such as the Administration hopes will result in the outcome of this year's farm bill debate, U.S. products would begin to regain their competitiveness on world markets. I cannot state strongly enough my personal belief that a return to sound economic health for American agriculture requires a greater market-orientation.

Further, I believe reduction of the Federal deficit is the single most important legislative initiative for farmers this decade. Farmers have paid dearly for the growing deficit through export loss and depressed commodity prices. When we borrow abroad to satisfy public and private credit demands, the exchange rate goes up, and the farmer is hurt.

The fundamental ability of American agriculture to compete in world trade is being masked by farm and economic policies that support our prices above world market clearing levels and keep exchange rates high. We tend to look for new and better bandaids to deal with symptoms; I strongly urge that we go for a cure instead, through deficit reduction and a needed new, dynamic farm policy for American agriculture.

Thank you, Mr. Chairman. That concludes my testimony; I will be glad to answer any questions you may have.

Senator QUAYLE. One issue that I want to focus on is exports. If we increase our exports, we are, obviously, going to increase the net farm income to the farmer, we are going to see a farm situation get better rather than deteriorate.

Now, as you look to increasing exports, going down your cure—and I certainly agree with your statement that reducing the deficit is of critical importance, but let's just focus on exports and export policy for a moment—how can we specifically do a little bit better in exports?

What are some of the problems out there that you see? I want to specifically get into the adequacy of GATT. I would like you to make, perhaps, a comment on some of the barriers that we find with other countries.

Perhaps you might even want to touch upon some of our own self-imposed barriers here that may contribute to some of our problems. I wonder if you might just think through with me for a few moments on just the idea of exports and what we can do to devise a strategy to increase them.

Mr. THOMPSON. We have found ourselves, in the 1980's, in the situation in which American farm exports have become increasingly uncompetitive in the export market. My testimony emphasized two of the factors that we impose upon ourselves that have reduced our export competitiveness: one being the strength of the dollar, the second being our own very rigid price supports which have prevented our prices from declining to a level that would permit us to maintain competitiveness.

I think those are two of the key factors. Furthermore, as you indicate, there are a number of problems out there in the international trading environment, where we find an increasing number of barriers being thrown up to trade. I alluded to the increasing protectionism that has occurred in my formal testimony. This normally happens in times of global recession, and we passed through a fairly deep global recession for two years at the beginning of the 1980's.

But probably the principal agricultural trade problems we confront that need to be addressed by the GATT are the prevalence of nontariff barriers to trade and the extent to which export subsidies are presently used and permitted under the GATT.

Non-tariff barriers to trade, through quotas and variable import levies, such as the Common Market has utilized, prevent countries from competing on the basis of price and productivity. What happens is you simply cannot compete by offering a better service or lower price because the quota or nontariff barrier will insure that your price goes up to the high level at which the internal prices are supported within the European Community.

The Community, as we know, has set very high price supports, which have induced large investments in agriculture and have resulted in expanded production. They have shifted from being a net importer to a net exporter of cereals over the past couple of decade and use export subsidies to get rid of their surpluses.

One of our biggest quarrels with them is that while we have used high levels of price supports at times in the past, we have tried to avoid exporting our adjustment onto the other countries in the world market by undertaking acreage reduction programs to avoid this excessive production.

On the other hand, the Community through its high price supports, has sent the signal to its farmers to produce more, but has never been willing to restrict acreage to limit that output. Instead, they have dumped their commodities onto the world market through export subsidies and forced the rest of the world to absorb the full adjustment.

I think an additional other factor that we do have to keep in mind regarding our future potential for expanding exports is that we need to maintain productivity growth. A lot of American agriculture's comparative advantage is dependent upon our past investments in agricultural research and extension, which has led to the adoption of hybrid corn and other high-yielding varieties, and made our productivity levels the envy of the world.

But, unfortunately, in the last decade we have reduced our support for agriculture research at the very time that many other countries have discovered the goose that lays the golden egg. Many European countries as well as many developing countries, such as Brazil, are investing massively in agricultural research because they recognize the gains that the United States experienced from productivity growth.

If we fail to maintain our relative position in this global productivity competition, we may see our agricultural export competitiveness erode over time. All we have to do is look at hybrid wheats.

The European Community's average wheat yield is more than twice that of the average wheat yield in the United States, and a lot of that yield is due to the much greater adoption of hybrid varieties of wheats. The Europeans are way ahead of us in this area.

We can complain about the export subsidies in the European Community, but in many parts of the Community there are quite efficient producers of wheat as a result of their adoption of these new technologies. So we are going to have to be cognizant of the importance of maintaining our investments in agricultural research.

That is a long answer, but I think those are the keys to our competitiveness; one, productivity, two, price policy, three, exchange rates, and four, working through multilateral negotiations to get export subsidies under control and to reduce nontariff barriers to trade, preferably through the GATT process.

Senator **Quayle**. Is the GATT process adequate to address these problems?

Mr. **Thompson**. We have had, as you know, a number of problems where even when we have gotten favorable decisions in the GATT, the decisions have not had sufficient teeth to actually bring about any redress for our grievances.

The administration remains convinced that multilateral negotiations are the appropriate way to go. While the GATT has had shortcomings, we are committed to try to make the GATT work better and to use it to gain redress for our grievances.

But I will concede that there have been problems in the past where we got favorable decisions that have not been implemented.

Senator **Quayle**. Do the laws and the process itself of the GATT direct themselves to properly define what fair free trade should be and to provide a remedy for export subsidies or the high price supports that we are faced with on a competitive basis internationally?

I guess the question is, are we going to have to go back in and take a close look at this, and call for a new round of discussions to meet some of the new problems that we find in the mid-1980's?

Mr. THOMPSON. Well, I think, yes. The answer to your latter question is definitely yes.

We do need a future round of multilateral trade negotiations. We are moving very rapidly in the direction of getting the ground rules laid for that process, and the administration has a strong commitment to making sure that agriculture is addressed and addressed frontally.

Now, we do have to admit that one of the reasons that agricultural export subsidies are tolerated to the extent they are under the GATT is that, in the past, specifically in the 1950's and 1960's we used high price supports and export subsidies in the United States. We only phased out direct agricultural export subsidies about 1973, and export subsidies on farm products were GATT legal because we wanted them to be because we were using them ourselves back then.

So basically what we have to do is move in the direction now of saying, look, we recognize that agricultural export subsidies are a major disruptive factor in the international markets. We also will need to concede that we, too, have some protectionist tendencies in agriculture. We tend to promote free trade for our exportable commodities and be more protectionist of some of our agricultural import competing commodities, like dairy products and sugar. When we go to the GATT, we will have to be willing to put some of our own protectionist measures on the table as well.

We feel that if we are willing to be forthcoming in the GATT process and recognize that we, too, employ protectionist measures and some of these measures may need to be put on the negotiating table, then we may well be able to get a much tighter export subsidies code for agricultural commodities in the future.

We are also hoping that we can get nontariff barriers, the principal barriers to agricultural trade, to be treated directly. In the past, nontariff barriers have not been addressed very directly, particularly in agricultural trade negotiations. Tariffs have been much more easily addressed under the GATT because it is very easy to say, OK, if everybody phases down the tariffs 5 percent, that is easily enforceable. It is hard to determine what the tariff equivalent of a nontariff barrier is changes in quota levels are not easily compared across countries and to commodities compensating adjustments the GATT negotiations where we go in to get concessions, we will have to offer up something in exchange.

So it will be difficult, but we are committed that we have to get on with multilateral trade negotiations. We feel that most other trading countries are moving in that direction and expect that agriculture will be a prominent part of the future GATT negotiations.

Senator QUAYLE. Finally, I wonder if you could give me a few specific examples of countries that have the nontariff barriers and what we are talking about specifically—maybe France or the European Community or Japan.

Mr. THOMPSON. The European Community and Japan are probably the two principal cases in point.

Senator QUAYLE. OK. Give me some specifics.

Mr. THOMPSON. OK. The nontariff barrier to trade that the European Community has used to develop its cereal sector is the variable import levy.

Senator QUAYLE. Is the what?

Mr. THOMPSON. It is the variable import levy, a variable import tariff, in effect.

Basically what they do is set a high domestic price support for an agricultural product and then charge the difference between that domestic support price and the lowest offering price of the day in the Port of Rotterdam, as an import tariff. That import tariff varies every day of the week. Its name is descriptive. It is a variable import levy which ensures that the world price, defined as the lowest offering price, in the Port of Rotterdam today, is brought all the way up to the internal support price within the Common Market.

This policy so stimulated large European Community farm production that European Community became a net grains exporter. Now, the European Community as a net exporter, the European Community just turns the tables and subsidizes back down to the world price from the high rigid domestic support price.

So, in effect, the use of variable import levies and variable export subsidies permits the European Community to maintain a stable internal price support for their commodity, but yet ensures that international trade is the residual: balancing any difference between demand and supply at the time they were a net importer and, now, balancing the difference between domestic supply and domestic demand, now that they have shifted into the export column.

That has been the principal nontariff barrier used by the Community.

Senator QUAYLE. That is sort of a tariff, though, in a way.

Mr. THOMPSON. It is a variable tariff, but the effect is almost identical to a quota: that there is no way, by being price competitive, you can beat the system because if you become more price competitive and lower your offering price, it just expands the tariff.

The tariff rises with your productivity or as your unit cost goes down.

Senator QUAYLE. But it is basically a quota, then. I mean, it is a tariff that results in a quota.

Mr. THOMPSON. Exactly. That has been, probably, the most adverse trade policy measure in the whole world trading system from the standpoint of U.S. agriculture. The European Community, as a result of the growth in the cereals production that accompanied that high price support and variable import levy policy, this led to a continuing decline in demand for our cereals on the world market and actually has led the European Community to shift over from being a net importer to a net exporter, today, in direct competition with the United States.

Japan has a similar policy in wheat. They set high domestic prices of flour and of wheat, and then they have an import monopoly which purchases the product at a lower price on the world market and, in turn, resells it into that domestic market at the higher fixed internal price.

So the effect of their policy is very similar to the European Community's. Japan sets the import price high, their import monopoly goes into the market and buys for whatever the market price is, and then the Government coffers absorb the difference between the lower world price and the higher domestic support price.

So, again, the effect is very similar to a quota because it does not permit you to compete in that market on the basis of price. There are other nontariff barrier into the Japanese market through either quotas or phyto-sanitary regulations in terms of health considerations, but the latter is out of my range of competence. But the resale price policy in Japan has very much been a barrier to imports into that market.

Senator QUAYLE. What is our club in the closet to convince Japan and the European Community not to do this?

Mr. THOMPSON. Well, I think the club in the closet is that they both benefit substantially from open access into the U.S. market. With the Europeans, when we have gotten favorable decisions in the GATT that have not been implemented, such as with the citrus case a year or so ago, we have threatened to retaliate with more protectionist measures on products that the European Community exports into our market. This has gotten their attention in the past and we are getting progress now. So our club is the open access that those countries enjoy into our markets. We can threaten retaliatory measures when they fail to——

Senator QUAYLE. Would our retaliation be in the same area? In other words, would we threaten retaliation of their agricultural products or would we threaten retaliation like steel or auto or electronics, or something else?

Mr. THOMPSON. There is no rule of thumb on whether you should stay within the range of agricultural products or not. In fact, sometimes you can get their attention more effectively by threatening retaliation in other industries.

So there is no particular advantage one way or the other.

Senator QUAYLE. OK. Dr. Thompson, thank you very much for your testimony and insight.

Mr. THOMPSON. Thank you, Mr. Chairman.

Senator QUAYLE. Next, we have an agricultural panel: Mr. Marion Stackhouse, Mr. Linwood Tipton, Mr. Lockwood Marine, and Mr. Joseph Halow.

Welcome, gentlemen. We are going to try to, if we can, institute a 5-minute rule. I have a little light there that will go on and off. Red means stop once your 5 minutes have passed, summarize your thought and present a concluding statement.

In this way, we will have time for some questions. Your entire testimony, as presented, will be made a part of the record.

STATEMENTS OF MARION STACKHOUSE, PRESIDENT, INDIANA FARM BUREAU, INC.; E. LINWOOD TIPTON, COMMISSIONER, NATIONAL COMMISSION ON AGRICULTURAL TRADE AND EXPORT POLICY; C. LOCKWOOD MARINE, SENIOR VICE PRESIDENT FOR COMMODITIES, CENTRAL SOYA CO., INC.; AND JOSEPH HALOW, EXECUTIVE DIRECTOR, NORTH AMERICAN EXPORT GRAIN ASSOCIATION

Senator **Quayle**. The first witness is a good friend of mine for a number of years. He is president of the Indiana Farm Bureau, Marion Stackhouse.

We are delighted to have you out here and appreciate your advice and leadership in the past. We certainly look forward to your testimony today to tell our committee how agriculture affects the employment and what we ought to be doing in the area of trade.

Mr. Stackhouse, welcome.

Mr. **Stackhouse**. Thank you, Senator.

I want to say that I am having a tough time with my nose, but I got hit with a log chain yesterday. So that explains what is going on.

Senator **Quayle**. Oh. OK. I can see that from here. I am glad you clarified that for the record. We might have thought it was something else.

Mr. **Stackhouse**. I know. That is why I did it. [Laughter.]

Senator **Quayle**. OK.

Mr. **Stackhouse**. Thank you very much.

Indiana Farm Bureau, of course, is the largest general farm organization—over 250,000 member families in our State. I serve as president of that organization. I am also a member of the American Farm Bureau board.

I appreciate this opportunity to give our views on trade and employment. I want to quote from American Farm Bureau Policy because I think it gives a very strong plank and position of our issue.

> The trade issues and policies traditionally represent a major portion of our annual resolutions process. Higher living standards throughout the world depend upon mutual beneficial trade among nations.
>
> We urge that coordinated U.S. policies to strengthen monetary and trade efforts be continued and increased in order to reduce trade barriers among nations.

I think that you see that this general statement reflects a broad understanding among our members of the importance of international trade to the health of the United States agricultural economy. What is probably not as well understood, even among our farmers, is the beneficial employment effects of trade not only in agriculture, but throughout the economy.

Before I comment on employment, I would first like to mention the effects of trade on income. In 1984, the total United States farm income in cash marketings was about $140 billion. Exports last year were valued at $38 billion.

Looking at the contribution from exports to farmers' income in this way, one can say that about $1 in every $3.70 of farm income is from sales derived from farm exports. Now, that is a little different from what Bob Thompson gave you, but he had total farm income and this is income from cash sales. So that is the difference in those figures.

Unfortunately, when exports fall, as they have in recent years, the negative reverberations are just as significant to the American farmers. A loss of $1 billion in sales overseas has the effect of reducing farm incomes by almost an equivalent amount.

Therefore, the loss of $12 billion in annual exports from 1981 to 1985 has, obviously, created severe problems in the United States farm economy. These problems naturally become problems of our farm policymakers.

To help explain why, let me quote from the U.S. Department of Agriculture brochure published in 1981 prior to the recent dramatic declines of United States agricultural exports.

> In the first five years of the '70s, United States farm programs totaled $14 billion compared to $7 billion in the last five years of the '70s. Farm exports in the first five years totaled $60 billion; the last five years they totaled $128 billion.

In other words, higher export earnings mean more farm support costs and lower export earnings mean higher costs. It is not too surprising, therefore, that as our exports have fallen in the 1980's, the costs of our farm programs have skyrocketed.

Clearly agricultural exports have a degree of importance extending far beyond that which is self-evident: that is, beyond just increasing demand for United States farm goods and contributing to the Nation's balance of payment. There is a strong connection between the growth in exports and employment in the United States.

Agricultural employment in the United States was approximately 3.3 million in 1984. Since the U.S. Department of Agriculture estimates that 1 in every 6 farm jobs is dependent on export, about 550,000 farmers and farmworkers are employed producing goods that are eventually exported overseas.

I would also like to point out that while farm population declined, farm employment remained fairly steady during the 1970's and early 1980's when our exports were strong. Employment was 3.4 million in 1971 and, with slight yearly fluctuation, was still approximately 3.4 million in 1982.

If farm exports do not recover in the next few years, it would not be surprising to see a continuation of the farm employment decline which has been occurring since 1982.

Significantly, the number of nonfarm jobs created by farm exports is even greater than farm jobs. There is a multiplier effect through the U.S. economy resulting from agricultural exports.

In 1980, the USDA put the multiplier for feed grains, rice, wheat and other oil seeds—the so-called bulk commodities—at about $1.05. In other words, each dollar of exports in those quantities created an additional $1.05 in economic activity in such areas as transportation, financing, warehousing the production of farm inputs.

For value-added commodities such as the processed foods, the multiplier is even higher. The 1982 USDA report put the multiplier for all agricultural exports at approximately $2, even.

This means that for each dollar of farm exports about twice that amount is contributed to the U.S. economy. Assuming that this number is accurate, the 44 billion dollars' worth of farm exports in

1981 created an additional 88 billion in the economic activity of the nonfarm sector.

By the same token, the drop in exports from that $44 billion level down to $32 billion would have cost the United States nonfarm economy about $24 billion in jobs and income. Much of the economic gains and losses resulting from the increased or decreased agricultural imports comes in the form of more jobs.

In addition to the jobs in the marketing of the farm products, a great deal of the economic activity generated in the United States from farm exports comes from the production of inputs for the farm. Farmers buy fertilizers, chemicals, capital equipment, building supplies and even household appliances with the profits made available by exports.

Most of these basic raw materials used by farmers are manufactured within the United States. This fact has special importance for Indiana, which is one of the largest steel producing States in the Nation.

The production of these materials generates countless jobs throughout the U.S. economy. USDA has reported in the past that over 30,000 jobs are created for each additional billion dollars of agricultural exports, and over half of these are off-farm jobs.

These figures are clearly aggregate and they may not be precise, but one very important qualification must be placed on them: The additional jobs associated with increased exports result from the growth in the volume of exports. In other words, it is not sufficient to say that an additional billion dollars' worth of agricultural exports creates over 30,000 jobs unless the additional billion dollars comes from increased tonnage or through value-added processing.

Simply increasing the value of the product exported through higher prices, either from economic factors or by Government devices, does not necessarily increase jobs. This leads me to my last point.

The United States is basically an exporter of raw bulk commodities. We produce and export raw commodities and the importing countries transform them into finished products. We export grain and meal which other countries turn into bread and livestock products.

This process costs the United States revenue and jobs. Last year, the Export Processing Industry Coalition issued a report which, I believe, gave a rather startling picture of the U.S. agricultural trade in relation to that of other countries, particularly the European Community. Two sets of figures in that report are of particular interest.

First, the U.S. share of world exports was 39 percent in volume terms between 1979 and 1981, but only 18 percent in value terms. Second, the average unit value of U.S. exports was $260 per ton over that period where the world average was $530 a ton.

This loss of value-added trade is largely in job-creating processed products. Because of this, the United States may actually be exporting more jobs than farm products.

The European Community is the world's exporter of many high-value and value-added commodities. They export huge amounts of poultry, butter, flour, beef, wine, and cheese, to name just a few; and they accomplish this because it is their policy to do so.

It may be necessary for the United States to adopt a similar policy to encourage exporting of value-added products.

We in Indiana are vitally concerned with the health of America's farm exports because the economic health of our farmers is so dependent upon these exports. Awareness of the need to increase the role of exports on domestic employment and this hearing will certainly help to do that.

I appreciate this opportunity to present our views.

Senator **QUAYLE**. Thank you very much, Mr. Stackhouse.

[The prepared statement of Mr. Stackhouse follows:]

STATEMENT OF THE INDIANA FARM BUREAU BEFORE THE SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY OF THE SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES WITH REGARD TO AGRICULTURAL TRADE AND EMPLOYMENT

PRESENTED BY
MARION STACKHOUSE, PRESIDENT
INDIANA FARM BUREAU

OCTOBER 31, 1985

The Indiana Farm Bureau is Indiana's largest general farm organization with over 250,000 member families. I serve as President of the organization, and I am also a member of the American Farm Bureau Federation's Board of Directors.

I appreciate the opportunity to present our views on the relationship between trade and employment, and I thank the Chairman for holding a hearing at this time on a topic on which we feel more understanding is needed.

The American Farm Bureau Federation strongly supports international trade as a means of improving economies of all countries. Trade issues and policies traditionally represent a major portion of our annual resolutions process. Let me quote just the lead paragraph of the International Trade section of Farm Bureau's 1985 policy book:

> "Higher living standards throughout the world depend upon mutually beneficial trade among nations. We urge that coordinated U.S. policies to strengthen monetary and trade efforts be continued and increased in order to reduce trade barriers among nations."

This statement reflects a broad understanding among our members of the importance of international trade to the health of the U.S. agricultural economy. What is probably not as well understood, even among our farmers, is the beneficial employment effects of trade not only in agriculture but throughout the economy.

Before I comment on employment, I would first like to mention the effect of trade on incomes. In 1984, total U.S. farm income from cash marketings was about $140 billion. Exports last year were valued at $38 billion. Looking at the contribution from exports to farmers' incomes in this way, one can say that about $1 in every $3.70 of farm income from sales was derived from exports.

Unfortunately, when exports fall, as they have in recent years, the negative reverberations are just as significant to American farmers. A loss of $1 billion in sales overseas has the effect of reducing farm incomes by almost an equivalent amount. Therefore, the loss of $12 billion in annual exports from 1981 to 1985 has obviously created severe problems for the U.S. farm community.

These problems naturally become problems for our farm policymakers. To help explain why, let me quote from a U.S. Department of Agriculture (USDA) brochure[1] published in 1981, prior to the recent dramatic declines in U.S. agricultural exports.

> "In the first 5 years of the seventies, U.S. farm programs totaled $14 billion compared with $7 billion in the last 5 years (of the seventies). Farm exports in the first 5 years totaled $60 billion, in the last 5 years $128 billion."

In other words, higher export earnings mean lower farm support costs and lower export earnings mean higher costs. It is not too surprising, therefore, that as our exports have fallen in the eighties, the cost of our farm programs have skyrocketed. Clearly, agricultural exports have a degree of importance extending far beyond that which is self-evident; that is, beyond just increasing demand for U.S. farm goods and contributing to the nation's balance of payments.

There is a strong connection between the growth in exports and employment in the United States. Agricultural employment in the United States was 3.3 million in 1984. Since the U.S. Department of Agriculture estimates that one in every six farm jobs is dependent on exports, about 550,000 farmers and farm workers are employed producing the goods that are eventually exported overseas.

I would also like to point out that while farm population declined, farm employment remained fairly steady during the seventies and early eighties when our exports were strong. Employment was 3.4 million in 1971 and, with slight yearly fluctuations, was still 3.4 million in 1982. If farm exports do not recover in the next few years, it would not be surprising to see a continuation of the farm employment decline that has occurred since 1982.

Significantly, the number of non-farm jobs created by farm exports is even greater than farm jobs. There is a multiplier effect throughout the U.S. economy resulting from agricultural exports. In 1980, the USDA put the multiplier for feed grains, wheat, rice and oilseeds--the so-called bulk commodities--at about 1.05. In other words, each dollar of exports of those commodities creates an additional $1.05 in economic activity in such areas as transportation, financing, warehousing and the production of farm inputs. For value-added commodities such as processed foods, the multiplier is higher. A 1982 USDA report[2] put the multiplier for all agricultural exports at 2.0. This means that for each dollar of farm exports about twice that amount is contributed to the U.S. economy.

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[1] What Farm Exports Mean to You, U.S. Department of Agriculture, May 1981.

[2] Arthur B. Mackie, The U.S. Farmer and World Market Development, Economic Research Service, U.S. Department of Agriculture, October 1983, p. 7.

Assuming that this number is accurate, the $44 billion worth of farm exports in 1981 created an additional $88 billion in economic activity in the non-farm sector. By the same token, the drop in exports from that $44 billion level down to $32 billion would have cost the U.S. non-farm economy about $24 billion in jobs and incomes. Much of the economic gains and losses resulting from increased or decreased agricultural exports comes in the form of more jobs.

In addition to jobs in the marketing of the farm product, a great deal of the economic activity generated in the United States from farm exports comes from the production of inputs for the farm. Farmers buy fertilizers, chemicals, capital equipment, building supplies and even household appliances with the profits made available from exports. Most of these basic raw materials used by farmers are manufactured within the United States. This fact has special importance for Indiana, which is one of the largest steel producing states in the nation. The production of these materials generates countless jobs throughout the U.S. economy. USDA has reported in the past that over 30,000 jobs are created for each additional billion dollars of agricultural exports. Of this number, over half are jobs off the farm.

These figures are clearly aggregate and may not be precise, but one very important qualification must be placed on them. The additional jobs associated with increased exports result from the growth in the volume of exports. In other words, it is not sufficient to say that an additional billion dollars worth of agricultural exports creates over 30,000 jobs unless that additional billion dollars came from increased tonnages or through value-added processing. Simply increasing the value of the product exported through higher prices---either from economic factors or by governmental device--does not necessarily increase jobs.

This leads me to my last point, Mr. Chairman. The United States is basically an exporter of bulk commodities. We produce and export raw commodities and the importing countries transform them into a finished product. We export grain and meal which other countries turn into bread and livestock products. This process costs the United States revenues and jobs.

Last year, the Export Processing Industry Coalition issued a report which I believe gave a rather startling picture of the U.S. role in world agricultural trade in relation to that of other countries, and to the European Community in particular. Two sets of figures in that report are of particular interest: first, the U.S. share of world exports was 39 percent in volume terms between 1979 and 1981 but only 18 percent in value terms; second, the average unit value of U.S. exports was $260 per ton over that period, whereas the world average was $530 per ton. This lost value-added trade is largely in job-creating processed products. Because of this, the United States may actually be exporting more jobs than farm products. The European Community is the world's largest exporter of many high value and value-added commodities. They export huge amounts of poultry, butter, flour, beef, wine and cheese, to name just a few, and they accomplish this because it is their policy to do so. It may be necessary for the United States to adopt a similar policy to encourage value-added exports.

Mr. Chairman, we in Indiana are vitally concerned with the health of America's farm exports because the economic health of our farmers is so dependent on those exports. Awareness needs to be increased about the role of exports on domestic employment and this hearing will certainly help to do that. I appreciate the opportunity to present our views and am prepared to answer any questions.

Senator QUAYLE. Next is Mr. Linwood Tipton, who is the commissioner on the National Commission on Agricultural Trade and Export Policy. He is also the executive vice president of the Milk Industry Foundation and the International Association of Ice Cream Manufacturers.

He has been a friend and comrade in battle over the past few years on various issues. Unfortunately, we have not won too many, but it has been a pleasant experience anyway.

Mr. Tipton.

Mr. TIPTON. Thank you very much, Mr. Chairman. The struggle goes on.

Senator QUAYLE. Yes, it does.

Mr. TIPTON. On behalf of the Commission, we really appreciate the opportunity to appear before you today. I think it is particularly noteworthy that you are testing and reviewing the relationship between agricultural exports and U.S. jobs, and it is far greater than the direct relationship that one might anticipate when considering agricultural employment only.

It extends through the entire economy in a very multiplying manner. You have already heard a number of statistics in that regard and I have a few in my statement which I will try to pass through very quickly, and move on to what I think you will ultimately want to talk about, which is what can be done to help expand trade.

When I talk about the system I think it is only fair that we look at the entire system, which is the farm and food system; and in a display of a bit of statistical chauvinism I would like to submit that the farm and food system when you combine them is really the largest industry in the United States.

It generated about $650 billion in economic activity and is equal to about 20 percent of the gross national product. It employs about 24 million persons and the assets of farming and agricultural business account for more than 50 percent of the combined assets of all manufacturing, retailing, and wholesaling industries.

So when you look at the entirety of the farm sector and the food system, it is enormous.

Last year, farmers spent about $140 billion on production inputs. About 80 percent of this total was for goods and services purchased off of the farm.

As has already been mentioned, the USDA estimates that a $1 increase in farm income can stimulate about $3 to $4 in economic activity throughout the system.

Employment bears out the fact that there is a massive amount of the entire industry that is dependent upon the agricultural sector with about 3.4 percent, or roughly 3 million persons, of the Nation's work force directly engaged in agricultural products. A full 20 percent, or 21 million, Americans are employed in other industries that comprise the total farm and food sector.

I think it is significant to note that each 1 billion dollars' worth of agricultural exports directly creates jobs for about 30,000 workers. I think agricultural exports are a very significant way to decrease unemployment, but when one thinks of the expanded effects through the rest of the economy, the multiplier effect, there is an additional 60,000 jobs that are created for each billion dollars of exports in the farm sector.

So with the decline in exports that has recently occurred, it has an extremely significant factor throughout the entire economy.

I would submit that this is a much more productive way to expand employment than some of the other programs that come from appropriated funds out of the budget.

We list, in the statement, several of the reasons that we believe agricultural exports have dropped and we can pursue those in more detail if you would like.

One of the things that I think brings home the problem of declining exports is, when one looks at the utilization of capacities in a number of the industries that are involved in the food and fiber sector, capacity utilization in the farm equipment sector declined to 8 percent in the final quarter of 1984, and that was very largely a result of the decrease in exports and the depressing effect that that had on the entire economy.

Capacity utilization in the pesticides manufacturing of potash industries has fallen by 33 percent and 22 percent since 1980. Soybean crushing plants are operating at 64 percent of capacity and grain-trading firms at 50 percent of capacity; 2,000 less railroad cars carried commodities on a weekly basis in 1984 than in 1980 and 1981.

The Commission was created for the purpose of finding ways by which we might expand sales of agricultural commodities. We have published an interim report and have identified some 20 different ways in which we can contribute to that effort; and the Commission is continuing to work on it. Most recently, we had a session, meeting with a group of representatives from the European Community in an effort to try to ascertain what are the areas that we could change and that they could change in order to both expand agricultural exports.

One of the areas that was identified for further and considerable additional work was the GATT treaty and the problems that we encounter with GATT.

Mr. Chairman, I note my time has expired. I appreciate the opportunity to appear before you.

Senator QUAYLE. Thank you very much, Mr. Tipton. Your entire testimony will be made a part of the record.

[The prepared statement of Mr. Tipton follows:]

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Testimony of Mr. Linwood Tipton
Member, National Commission on Agricultural
Trade and Export Policy
before hearings of the Senate Subcommittee on
Employment and Productivity
October 31, 1985

It is a privilege to appear before you today in behalf of the National Commission On Agricultural Trade and Export Policy, on which I serve. The Commission salutes your appreciation of the important relationship which exists between agricultural trade and general employment in the US economy. This is a relationship that is well understood by most economists, and well known to most farmers and businessmen engaged in agriculture. It is certainly well known to the Commission. Nevertheless, it is not generally recognized outside of agriculture. An appreciation of the relationship between agriculture and general employment is fundamental to an understanding of the role agriculture plays in the general economy. For this reason, the Commission warmly welcomes your hearings today, and commends you for your dedication to this greater understanding.

The theme of my testimony today is both simple and basic:

1) A viable agriculture is a fundamental element of a healthy US economy

2) Agricultural trade is a vital factor in maintaining a viable agriculture.

3) The recent decline in agricultural exports has undermined growth in the agricultural sector and the general economy.

4) Consequently, efforts to expand agricultural trade stand to benefit not only agriculture, but the general economy.

The Commission was established by an Act of Congress in August, 1984, to assist in the process of expanding US agricultural trade. We have already submitted to the Congress a 20-point plan to achieve this objective, and we will continue to work towards this goal. We invite you to work with us in the development of future policy. Having said that, let me now turn to the specific matter under consideration by your subcommittee this morning.

AGRICULTURE'S ROLE IN THE GENERAL ECONOMY

The farm and food system of the United States is both the Nation's largest industry and its major employer. In 1983, this industry generated $650 billion in economic activity, an amount equal to 20% of the Nation's Gross National Product (GNP). It employed 24 million persons. The assets of farming and agribusiness accounted for more than 50% of the combined assets for the manufacturing, retailing and wholesaling industries of this country. The agricultural industry is big and, therefore, vital to the maintenance of a healthy US economy.

Agriculture's role in the general economy is both diverse and complex. While there is wide recognition of the impact that changes in agriculture have on the farm sector, few recognize the effect those changes multiply forward to the rest of the economy.

Farming has a major impact on the US economy through the multiplier effect. Last year farmers spent over $140 billion on production inputs. About 80 percent of this total was for goods and services puchased off the farm. USDA has estimated that a $1 increase in farm income can stimulate an additional $3 to $4 in economic activity. Real net farm income for the last four years has declined by about 45 percent from the previous ten years. A return of farm income to that level would add approximately 1.5 to 2 million jobs to the economy, assuming farmers spend that additional income on farm inputs.

It is important to understand that farmers are but one segment of a vast food and fiber system. The agricultural industry is an intricate chain of transactions beginning at the farm gate and culminating in the consumption of finished food, fiber and industrial products in domestic and international markets. Along this chain, raw commodities are transformed into consumer goods and value added to the economy in the form of profits and employment. A variety of related industries play an important role--processors of food and fiber, industrial and equipment manufacturers, shippers and handlers, grain merchandisers, retail outlets for food and fiber products, bankers and financial institutions and chemical and fertilizer manufacturers, to name a few.

Employment figures bear this out. While 3.4 percent--or roughly 3 million persons--of Nation's total workforce is directly engaged in production agriculture, a full 20% of the total workforce--21 million Americans-- are employed in other industries that comprise the total farm and food system. These 21 million Americans have a stake in changes occurring in agriculture, even if they are not aware of the fact. Conversely, farmers suffer when economic conditions cause contractions in the marketing system upon which they rely. Farmers and workers in related industries, therefore, have a common bond in maintaining both a healthy agricultural system and a healthy general economy.

THE IMPORTANCE OF TRADE FOR AGRICULTURE

Agricultural trade is vital to the maintenance of a healthy US farm and food system. Two of every five acres harvested in this country are devoted to the production of crops that are exported. All of the major crops produced in the United States--corn, wheat, soybeans, cotton, rice, poultry, cattle, to name just a few--are export commodities. And, while export sales are a more important source of earnings for some commodities--wheat for example--than for others, the producers of every crop grown in ths country have some stake in maintaining and improving US export performance.

The stake is equally great for related industries. The USDA's Economic Research Service estimates that the $36.6 billion of agricultural exports in 1982 generated a total of $81.8 billion in total business activity. The additional $45.2 billion reflects the contribution of various supporting activities required to package and transport products from the farm gate to the final point of delivery.

Other sources cite an even greater contribution by agriculture. S.C. Schmidt of the University of Illinois has estimated that every dollar earned on agricultural exports initially creates another $1.05 worth of output in the US economy, an immediate multipiier effect on 2.05. Over the longer term, every dollar of agricultural exports creates an additional $2.50 to $3.00 of additional GNP. Schmidt reports that total earnings on agricultural commodities exported in 1984 generated an additional $40 billion in short-term economic activity and will yield a total contribution of $133 to $152 billion to the Nation's gross national product over the longer term.

Each one billion dollars worth of agricultural exports directly creates jobs for a total of 30,000 workers. 1.14 million workers in the agricultural and food sector were required to produce, process and sell the $38 billion worth of agricultural exports in 1984. However, the multiplier effect of these exports created an additional 60,000 jobs per billion dollars of exports in the nonfarm and food sector. Therefore agricultural exports in 1984 created total employment for 3.4 million people in the general economy.

DECLINING EXPORTS IMPACT THE TOTAL ECONOMY

The recent decline in US agricultural exports has seriously undermined growth in the agricultural sector, with a corresponding negative impact on the rest of the general economy. The value of US agricultural exports stood at over $41 billion in 1981. The value of those exports this year will be under $30 billion for the first time in a decade.

Numerous factors account for this serious decline:

1) The rapid appreciation and continued strength of the US dollar in relation to other world currencies
2) Slow economic growth in industrial and middle income countries
3) Third-world indebtedness
4) Increased foreign production of food and fiber
5) Soviet purchasing decisions
6) Unfair foreign competition
7) Poor US domestic and international policies.

Perhaps more remarkable than the causes of this decline has been the effect of the decline on US economic activity. The 17.6% decline in agricultural exports since 1981 has resulted in lost sales of farm commodities and products totaling 84.3 million tons. Three billion bushels of commodities and products have lost markets since 1980, the equivalent of the entire carryover stocks of wheat in the past two years, the carryover stock of corn in 1982-83, and four times the total ending stocks of soybeans in the last four marketing years. The damage to farmers wrought by these circumstances is only too evident--price depressing surpluses have lowered net farm income and eroded agriculture's investment base. But the effect of the decline in exports goes much deeper.

The value of U.S. agricultural exports lost since 1981 will total over $36 billion by 1986. As a result of these losses, the general economy has been deprived of economic activity that would have added $300 billion to the nation's gross national product (GNP). In the absence of any downturn in exports, millions of jobs could have been added to the economy. Government costs of farm programs could have been slashed. Economic recovery could have buoyed the agricultural industry, generating wealth and advancing the welfare of the nation.

Instead, unprecedentedly high numbers of farm producers face bankruptcy throughout the country. Capacity utilization in the U.S. farm equipment sector declined to 8 percent in the final quarter 1984. Capacity utilization in the pesticides manufacturing and potash industries has fallen by 33 percent and 22 percent since 1980. Soybean crushing plants are operating at 64 percent of capacity and grain trading firms at 50 percent. 1,200,000 less bushels of basic commodities were loaded on barges on a weekly basis in 1984-85 than in 1981-82. Two thousand less railcars carried commodities on a weekly basis in 1984-85 than in 1980-81. The story is equally serious for other industries.

EFFORTS TO EXPAND AGRICULTURAL TRADE WILL BENEFIT FARM AND NON-FARM INDUSTRIES ALIKE

I have demonstrated that farmers and workers in many other industries linked to the farm and food system share a common stake in maintaining a viable agriculture. All these industries have suffered as a result of recent declines in agricultural exports. Consequently, all will benefit from efforts by Congress to expand agricultural trade.

I refered initially to the program proposed by the Commission which is dedicated to this objective. The gist of those recommendations are contained in the pamphlet entitled "20 Ways to Improve Agricultural Exports" which has been provided to you. Copies of our 148 page Interim Report -- upon which the pamplet is based -- may be obtained upon request. The program proposed in the report is a hard-hitting, aggressive, and balanced approach to the trade problems affecting U.S. agriculture. It is a program that matches the trememdous challenges -- the problems and opportunities -- which U.S. agriculture will face in world markets for years to come. It is a program of effective competition, unleashing the potential of U.S. agriculture in world markets through a reorganization of U.S. trade policy, a revitalization of market development, a re-alignment of our relations with competing nations, and re-orientation of our food aid programs to expand the Nation's response to world hunger and develop effective demand for farm products in developing countries.

The Congress has already taken steps across a broad array of fronts to address the issue of declining exports. The farm bill being debated on the floor of the Senate today is one aspect of these efforts. However, greater emphasis must be placed on restoring US agriculture to a position of preeminence in world markets. The direct benefit of such efforts will be realized not only by farmers, but will stimulate employment and wealth throughout the economy.

Americans rarely think of their welfare as linked to the agricultural system of the United States. It is, in a fundamental way. The challenge of reversing the current trends affecting U.S. agricultural trade is not a challenge for agriculture alone, but for the nation as a whole. Declining agricultural trade results in declining prospects for employment in the economy as a whole. It is time for the nation to confront this fact and deal with it as a priority of Government and the economy.

Senator QUAYLE. Our next witness is Mr. Lockwood Marine who is the senior vice president for commodities of Central Soya in my second hometown of Fort Wayne. My real hometown is Huntington. My second hometown has always been Fort Wayne.

I enjoyed working with Mr. Marine and others at Central Soya over the years and welcome him to the committee. Thank you for coming and proceed at your pleasure.

Mr. MARINE. Thank you, Mr. Chairman. It is a pleasure to be here with you.

In addition to my responsibilities at Central Soya, I also serve as vice chairman of the National Soybean Processors Association, the trade association of soybean processors in the United States.

Some of my comments will reflect the views of my fellow processors as well.

Both my company and my industry applaud you and the subcommittee for holding a hearing which is both timely and of vital importance to us.

The effect of international trade on employment and productivity for U.S. agriculture and the soybean complex, in particular, is quite dramatic. This effect has been noted by the agriculture policy committee in its advice to the President concerning a round of multilateral trade negotiations.

It has been quantified for value added processed U.S. agricultural exports such as soybean meal and oil by USDA's Economic Research Service which has demonstrated the need for innovative and cooperative labor/industry approaches, such as the Export Processing Industry Coalition, to protect and promote both U.S. exports and U.S. jobs, and has led NSPA to the U.S. Trade Representative with a section 301 petition seeking relief from unfair foreign trade practices in the soybean complex.

In 1984, the last year for which full-year figures are now available, the United States exported approximately 40 percent of its soybeans, 25 percent of its soybean meal, and 15 percent of its soybean oil. Virtually every other acre of soybeans in the United States is planted to produce for export markets.

When the U.S. soybean industry suffers, so do U.S. export earnings. So, also, does the State of Indiana for that matter where the value of our soybean crop approaches $1 billion each year.

While U.S. soybean complex export earnings reached $8.2 billion in 1980, it appears they will approach only $5 billion in 1985. Although the soybean complex remains as one of the largest positive contributors to the Nation's balance of trade, a 40-percent decline in U.S. soybean complex export revenues in 5 years cannot and should not be taken lightly.

In the last 5 years, U.S. soybean exports have dropped roughly 25 percent while, over the last 10 years, our shares of soybean meal and oil markets have dropped by approximately 50 percent each. This is not a comfortable performance for a commodity group which has become an integral part of the United States farm economy.

The effect of the international trade performance of agriculture on United States domestic employment has been noted by the Agriculture Policy Advisory Committee in its advice to the President concerning the U.S. proposal for a new round of multilateral trade negotiations.

The committee noted that, since 1980, the United States has lost 2 million jobs in the agricultural sector. Recognizing the relationship between United States agricultural export competitiveness and United States domestic employment, in 1981 NSPA, together with our counterparts in other value-added agriculture processing industries and 10 international unions under the auspices of the AFL-CIO formed the Export Processing Industry Coalition [EPIC].

One of EPIC's first and highest priorities was to stimulate interest within the Department of Agriculture in quantifying the effects of international trade in processed value-added agricultural products upon the U.S. economy at large, especially upon employment and productivity. This was accomplished in two reports by ERS in 1981 and 1982.

I think you will agree the results are dramatic and strongly suggest that the United States should place greater policy emphasis on exports of processed value-added products to stimulate economic activity and create more jobs at home.

For example, if U.S. soybean oil exports were increased by 500 million pounds a year, this would increase soybean crush by 45 million bushels resulting in 1½ million acres of additional soybeans.

This would also result in production of an additional 1 million tons of soybean meal for export.

Applying the USDA multipliers, we find that gross domestic output would increase by $2.2 billion, gross employment by 50,000, and personal income by $521 million.

Not only would these economic benefits accrue, but also the Federal Treasury would receive an additional $51 million in corporate income tax revenues and personal income tax would increase by $121 million.

We in the U.S. soybean industry have sought to confront the declines in world market share of soybean products by resorting to the Nation's unfair trade practice laws, specifically section 301 of the Trade Act. However, our petition, filed with the USTR in April 1983, has borne little positive fruit.

We are left with a situation where competitors, primariiy Argentina and Brazil, obtained the benefit of subsidies to take away U.S. export markets with no threat of countermeasures from the United States.

Since my time has elapsed, I will conclude my statement.

Thank you.

Senator QUAYLE. OK. Thank you very much, Mr. Marine. Your entire statement will be part of the record.

[The prepared statement of Mr. Marine follows:]

UNITED STATES SENATE
COMMITTEE ON LABOR AND HUMAN RESOURCES

SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY
HON. DAN QUAYLE, CHAIRMAN

Testimony of
C. LOCKWOOD MARINE, VICE CHAIRMAN
NATIONAL SOYBEAN PROCESSORS ASSOCIATION

October 31, 1985

Mr. Chairman, Members of the Subcommittee, Ladies and Gentlemen. For the record, I am C. Lockwood Marine, Senior Vice President for Commodities of Central Soya Company, Inc., based in Fort Wayne, Indiana. I also serve as Vice Chairman of the National Soybean Processors Association, the trade association of soybean processors in the continental United States. Both my company and my industry applaud you and the Subcommittee for holding a hearing which is both timely and of vital importance to us.

The effect of international trade on employment and productivity for U.S. agriculture generally and the soybean complex specifically is quite dramatic. This effect--

* Has been noted by the Agricultural Policy Advisory Committee in its advice to the President concerning a new round of multilateral trade negotiations;

* Has been quantified for value-added, processed

U.S. agricultural exports--such as soybean meal and soybean oil--by USDA's Economic Research Service;

- Has demonstrated the need for innovative and cooperative industry/labor approaches--such as the Export Processing Industry Coalition--to protect and promote both U.S. exports and U.S. jobs; and

- Has led NSPA to the U.S. Trade Representative with a section 301 petition, seeking relief from unfair foreign trade practices in the soybean complex.

Mr. Chairman, I'd like to touch briefly on each of these points but not without first underscoring the importance of international trade to the U.S. soybean complex. In 1984, the last year for which full year figures are now available, the U.S. exported approximately 40 percent of its soybeans, 25 percent of its soybean meal, and 15 percent of its soybean oil. Virtually every other acre of soybeans in the U.S. is planted to produce for export markets.

With such a dependence on world export markets, it goes without saying that when the U.S. soybean industry suffers, so do U.S. export earnings. So does the State of Indiana for that matter, where the value of our soybean crop approaches $1 billion each year! While

U.S. soybean complex export earnings reached $8.2 billion in 1980, it appears that they will approach only $5.0 billion in 1985. While the soybean complex remains as one of the largest positive contributors to the Nation's balance of trade, in light of the mounting U.S. trade deficit, a 40 percent decline in U.S. soybean complex export revenues in five years cannot and should not be taken lightly.

Accompanying this decline in export revenues have been declines in U.S. exports of soybeans, soybean meal and soybean oil. In the last five years, U.S. soybean exports have dropped roughly 25 percent, while over the last decade the respective U.S. shares of world soybean meal and oil markets have dropped by roughly 50 percent apiece. That is not a comfortable performance for a commodity group which has become as integral a part of the U.S. farm economy as corn and wheat and which is vital to U.S. and world food security in essential protein.

The effect of the international trade performance of agriculture on U.S. domestic employment has been noted by the Agricultural Policy Advisory Committee, in its advice to the President concerning the U.S. proposal for a new round of multilateral trade negotiations. In what those of us in the soybean industry think is a significant and sobering reflection, the Committee noted that since 1980, the U.S. has lost two million jobs in the agricultural sector.

That dramatic effect on U.S. domestic employment has not been lost on the soybean processing industry, or on the various labor unions which represent many of its employees. Recognizing the relation between U.S. agricultural export competitiveness and U.S. domestic employment, in 1981 NSPA--together with our counterparts in other value-added agricultural processing industries and 10 international unions under the auspices of the Industrial Union Department of the AFL/CIO--formed the Export Processing Industry Coalition ("EPIC"). We think that EPIC is a unique but innovative partnership between industry and labor to serve our common objective in adding value to the soybean crop in the United States and thereby increasing domestic employment.

One of EPIC's first and highest priorities was to stimulate interest within the Department of Agriculture in quantifying the effects of international trade in processed, value-added agricultural products upon the U.S. economy at large, especially upon domestic employment and productivity. This was accomplished in two reports of USDA's Economic Research Service issued in 1981 and 1982 [**See** ERS Staff Report No. AGE55810701 of July 1981; ERS Staff Report No. AGE5820714 of June 1982].

I'd like to give you an example of what USDA's economists estimate the effects of increased exports of soybean products can mean for the U.S. economy. I think you will agree the results are dramatic and strongly suggest that the U.S. should place greater policy emphasis on exports of processed value-added agricultural products to stimulate economic activity and create more jobs at home.

For example, if U.S. soybean oil exports were increased by 500 million pounds a year, this would increase soybean crush by 45 million bushels, resulting in profit incentives to U.S. soybean growers which would increase soybean acreage by 1.5 million acres, assuming an average yield of 30.3 bushels per acre. This would also result in production of an additional 1 million tons of soybean meal for export. Applying the USDA/ERS multipliers to demonstrate the effect of such an increase on the U.S. economy, we find that gross domestic output would increase by $2.2 billion, gross employment by 50,000, and personal income by $521 million.

At first blush, these numbers may appear to be incredible, but they are thoroughly defensible when you consider that the USDA/ERS multipliers take into account employment effects throughout the whole economy, following the food and fiber chain from the farm to the consumer's table. For the soybean complex, that means the grower, his suppliers, processors, refiners, and transportation, distribution, and food marketing components.

Not only would an increase of soybean oil exports by 500 million pounds benefit U.S. employment, income, and output, but also USDA/ERS has calculated the indirect benefit for the federal treasury in the form of an additional $51 million in corporate income tax revenues, and an additional $121 million in personal income tax revenues. Considering the increasing federal budget deficit, again the beneficial effects of increased policy emphasis by the U.S. on value-added processed agricultural products should not be ignored.

We in the U.S. soybean processing industry have sought to confront the declines in world market share of soybean products which we have suffered over the past decade by resorting to the nation's unfair trade practice laws, specifically, section 301 of the Trade Act. However, our petition, filed with the U.S. Trade Representative in April 1983 has borne little positive fruit to date. We are left with a situation wherein our competitors, primarily Argentina and Brazil, obtain the benefit of subsidies to take away U.S. export markets with no threat of countermeasures from the United States.

The international debtor status of our competitors in South America has effectively insulated them at high policy levels from any meaningful U.S. action, based on existing discretionary trade remedies, such as section 301. It has become increasingly evident that only legislative strengthening of U.S. law--coupled with political action--to effectively address foreign subsidies and unfair trade practices holds a hope for redressing the decline of U.S. soybean complex exports. In this regard, Mr. Chairman, our industry will become much more active with you and your colleagues in the Senate on ways and means to strengthen U.S. agricultural exports.

In conclusion, whether seen from the perspective of **loss** of employment--such as the Agricultural Policy Advisory Committee's sobering estimate of two million lost jobs in U.S. agriculture over the last five years--or from the perspective of **gains** in employment--such as USDA/ERS's estimates of increased domestic output and employment if more policy emphasis is placed on increasing U.S. exports of value-added, processed agricultural products, such as soybean oil and soybean meal--the effects of international trade on U.S. employment and productivity are clear: International trade is vital to the economic health of the U.S. agricultural sector and all those of us who work in it.

Thank you, Mr. Chairman, I would be happy to answer any questions at this time.

Senator QUAYLE. Our final witness is Mr. Joseph Halow who is the executive director of the North American Export Grain Association.

Welcome, Mr. Halow.

Mr. HALOW. Thank you.

I would like to mention, first of all, that my name is misspelled here, actually, for the record.

Senator QUAYLE. Oh.

Mr. HALOW. It should be spelled with one "l".

Senator QUAYLE. Oh. Well, thank you for the correction. Is it still pronounced Halow?

Mr. HALOW. Yes. It shouldn't be, but it is. [Laughter.]

Senator QUAYLE. That would be Halo.

Mr. HALOW. In any event, everyone has already covered essentially the same type of material and everyone has the same type of statistics, and I have mine, too. But if I may, I would like to present my statement, for the record and would just like to make a couple of other comments; before you proceed with the questioning.

Agriculture has found itself in a tremendously tight situation here in the United States. It has to continue to increase its production, for with increasing costs for the farmers, the farmer's only hope is to increase his production, as a matter of fact, because the farmer continues to receive essentially the same unit price for his production.

The only way that he can get by with increasing costs, is to increase his production. If he has a smaller number of units to sell, he must then receive a higher price for them, and I think this creates a peculiar dilemma also for the United States.

The United States, which depends on U.S. production for its food and fiber, wants them at reasonable prices. If the problems that are affecting U.S. agriculture at the present time with decreasing exports were really to be felt in the public, as could eventually happen, the U.S. public would find itself in rather dire straits.

The production would be less; the unit prices would be higher; and the Nation, obviously, would have the opposite of benefits, as a matter of fact, from its exports. It would be prejudiced because of decreased exports and decreased export income.

Now, people have indicated that only about 3 or 4 percent of the Nation is actually farming; but this affects between 20 and 30 percent of the U.S. population. This is the figure that I have also used.

The farmers are finding it more and more difficult to continue to farm, but no one is really mentioning the rest of the industry. The industry is laying off people, too.

We have estimated that there have been hundreds, if not thousands, laid off in the Chicago area, alone. This goes on throughout the entire industry—through the transportation industry, steel industry, chemicals, everywhere.

They have all been very severely affected by the decrease in agricultural exports. The solution is going to be rather difficut because the U.S. influence on the U.S. markets is decreasing every year. With our decreased and still decreasing share of the markets, the U.S. influence on those markets continues to decrease.

We find that with Canadian grains, Canadian wheat is selling about 10 percent below U.S. prices and Argentinian wheat is selling at about 20 percent below U.S. prices. This makes it somewhat difficult for the United States to maintain its influence over the export markets. I think this is also contrary to what Mr. Thompson said this morning.

With that, I will terminate my comments and then wait for questions.

Senator **Quayle**. OK. Thank you very much.

[The prepared statement of Mr. Halow follows:]

Statement of the North American Export Grain Association, Inc.
to the
Employment & Productivity Subcommittee
of the
Senate Labor & Human Resources Committee
on Trade Impact on Employment
October 31, 1985

My name is Joseph Halow, and I am the Executive Director of the North American Export Grain Association. As the name suggests, our organization, comprised of 38 of the leading exporters of U.S. grain, is dedicated to the expansion of U.S. grain exports. It is an older organization, founded in about 1916 in New York, where it operated until it moved to Washington about ten years ago. Our members are obviously very interested in any issue which affects U.S. grain exports, and we appreciate the opportunity to present a statement before this Committee today.

I should add, first of all that I shall speak only of grain exports and their effects on the U.S. economy. U.S. agriculture is obviously much larger than the grain portion, but I do not feel competent to speak about the exports of other agricultural products. Grain represents, in any event, the single largest portion of the U.S. agricultural export movement. I could add, furthermore, that today the grain export outlook appears to be as bleak as at any time since the organization's inception.

Although there was some question about the importance of exports to U.S. agriculture as recently as ten years ago, there is hardly anyone now who doubts that grain exports are the basis on which U.S. domestic agricultural policy is centered. The importance of exports to grain agriculture is obvious when one looks at the figures: U.S. production of wheat this year is estimated to be about 2.418 billion bushels. Domestic consumption, at best, accounts for no more than 1.1 billion bushels. Corn production is estimated at 8.6 billion bushels, and domestic consumption estimated at no more than 5.5 billion bushels. There is no home for the balances except into export, for the United States cannot continue to keep adding to its inventories. It is this large production which keeps U.S. domestic prices relatively reasonable for both food and fiber, but the surpluses necessary to maintain this price balance must be exported. Without exports there would be a collapse of U.S. agricultural policy and the domestic agricultural marketing system. There would be severe problems for domestic users of U.S. grains, higher prices for all grains with severely curtailed production. Not only would farmers find themselves unemployed but even those who continued to farm would find themselves underemployed. There would be a severe disruption also to the entire community affected by agricultural income. This would include the entire Midwest known chiefly for its agriculture and also several of the so-called industrial states, such as Ohio, Illinois and Michigan. The situation I am describing has not yet happened, but the United States has taken a giant step in that direction through the gradual loss of its export markets during the past several years.

There are many reasons for the erosion of the markets, but this committee is not here to decide that. Of far greater interest to this committee is the loss of jobs that has resulted from the decrease in exports--that is, the extent to which U.S. unemployment has been increased. It is quite difficult to indicate this in numbers, since the U.S. agricultural system spreads over such a wide area of American life and, more specifically, the U.S. economy. For Agriculture is not merely the three to four percent of the population which farms, but it constitutes at least twenty to thirty percent of the U.S. population who derive their income directly from agriculture. Any attempt to put into numbers the effect of the export erosion on U.S. employment would---if it were possible---require more time than we have had to prepare for these hearings. Anyone in agriculture knows it involves also the grain handling and storing facilities, the transportation system which moves the grain from one location to another---trucks, barges, trains---the processors, which convert the grain into flour, soybean meal, corn meal, corn oil, soy oil, etc., much of which is destined for export. The system is huge, but it does not stop there. It involves also the machinery and implement manufacturers and the entire chain of dealers they have throughout the United States, the banking system, which finances the farm operations and whose income depends on the farmer's income. The chemicals industry is also highly dependent on agriculture, considering the large amounts of fertilizers used, not to mention the weed killers, insecticides, etc. The petroleum industry in the United States is also dependent on agriculture and is obviously very seriously affected by any fall-off in income from agriculture. The steel industry is also one not usually and openly noted as being dependent on agriculture but it is also strongly dependent on agriculture and agricultural export movement.

A part of the transportation system which does not readily come to mind when one considers agricultural exports---and yet very directly related---is the port activity. It has been estimated that each ton of grain which moves through a port brings in about $3.00 or $4.00 worth of port activity which is vital to the U.S. ports. The port of Houston, obviously now depressed, is as depressed because of the severe cutback in wheat export shipments as it is because of the depression in the oil business.

Many of the small towns in the Midwest have already become almost ghost towns, due to the reduction in farm income. It is easy to imagine that a small town could almost die if its income is sharply reduced. But it is also difficult to imagine that even such large cities as Kansas City, St. Louis, Chicago, Indianapolis, Denver and Minneapolis, Duluth and Detroit, would not be seriously hurt if there were to be any further reduction in U.S. exports. Then too there are the other, smaller cities in the U.S. Midwest, such as the homes of the manufacturers of the John Deere and International Harvester farming equipment. There too we find serious unemployment problems, directly related to the reduction in U.S. agricultural exports.

One continues to hear of the plight of the poor farmers in the Midwest, who are strapped for cash, many of them losing their farms and forced then to find employment in some other economic sector. The attrition in the rest of the industry is just as acute, although it is not brought to the public's attention to the same extent. I am speaking of the numbers of firms which have gone out of business and the rest of them, who have all had to cut back in their staff and operations. For the U.S. exporting system is operating at about half of capacity, and with it the rest of the system is suffering. There are far fewer shipments going through the Great Lakes, and the vessels which carried grain through the Great Lakes are also operating at only about half capacity. The railroads are also having problems, and so on, all through the system. This involves huge lay-offs of personnel, some of whom have tried in vain to relocate within the industry. Our individual member firms know how many people they have had to lay off, and some have estimated that there have been hundreds---if not thousands---laid off in the Chicago area alone. With U.S. grain exports decreasing from 107.2 million tons in 1981/82 to an estimated 78.3 million tons in the last four years, ranging from 54% of the world's trade in grain accounted for from the United States to only 42% and still decreasing, it is obvious that the firms are operating at only a fraction of their former capacity. In cutting down capacity they cut down on personnel. This has happened throughout the industry, and it is happening in support industries which are not directly or indirectly related to agriculture.

If this situation were not so, Congress would not have acted as it has in passing farm legislation. It is not merely voting the aid to the three or four percent who farm but to the entire agricultural community, which is at present paralyzed because of the slowdown in agricultural exports. Until and unless the United States can bring its agricultural exports up to a level commensurate with the United States' productive capacity, the nation will continue to have agricultural problems, and the Congress will continue to have to vote aid to agriculture. For twenty to thirty percent of a nation's economy is enough to be felt in all of it.

Senator **Quayle**. I guess I would like to ask the panel if they could identify the No. 1 thing that we could, in fact, be doing to increase exports. If you had to put your finger on it and say, well, this is our No. 1 problem, what would it be?

I know that there are a number of problems in increasing exports and maybe you cannot just say that it is one; and, if so, fine. But I wonder if you might just think through with me a moment to try to identify the No. 1 impediment in your mind to seeing an increase in our exports.

Mr. **Tipton**. I would be happy to start off.

Senator **Quayle**. Mr. Tipton, do you want to start first?

Mr. **Tipton**. Yes.

On behalf of the Commission, I think those of us who are working in that area feel very strongly that the No. 1 problem is the value of the dollar relative to other currencies.

We have been urging action in this regard on the administration. We have written the President and we were very, very pleased that the effort is now being made for some market intervention.

I think market intervention is a very difficult thing to actually be effective except when there is a possibility that the values of the exchange rates are moving anyway. I think that that seems to be the case.

So the action by the Japanese will probably be very, very helpful. We would say that that is probably the No. 1 issue that needs to be addressed.

The intervention is one way of doing it. The other way is get our budget into alignment.

Senator **Quayle**. Would the rest of the panel agree with that?

Mr. **Stackhouse**. I think he is exactly right. I guess I would just say, one, would be the Government. The Government needs to do two or three things.

In the first place, the delay in the farm bill causes us not to know what we are facing out here. As a result, you—nobody—can count on anything.

I am talking about the banking industry; I am talking about farm interests; I am talking about the supply industry. Everybody has a problem because we are in no man's land today. We do not know what the rules of the game are going to be.

Along with it, I agree with Bob Thompson. The most important one is the Federal budget. When it is out of balance and we keep spending, interest rates are high on farms today and this is taking its toll.

As a result, the banks are going to feel this and Main Street is going to feel it. If there is not any profit, they are not going to buy any products. Then this gets back to labor in the basic industries.

You know, you cannot buy a combine if you have no money to buy it, and the bank will not loan you any more money. So you have job layoffs. This, I think, is it.

I would put the budget as a very basic thing, because it affects many other things which get into inflation, and financing, and jobs, and the profit picture for agriculture. Frankly, we are right where Joe Halow talked about: The Federal Government is going to end up owning most of this grain today because the market is not there.

That is going to have its repercussions in another year. Whether or not we can get back into the world market is going to be pretty important, and whether or not we can be competitive.

We are sending the wrong signals around the world. If we send the wrong signals, we are not going to get back into that market.

So I say that the Government is the real key in what is going to happen in the future of agriculture.

Senator **QUAYLE**. What wrong signals are we sending, do you think?

Mr. **STACKHOUSE**. Well, I think some people are saying we can produce only for the domestic market. That has been talked about.

If we are going to produce for the domestic market alone, we are not going to have this 50 production of soybeans that Mr. Lockwood Marine talked about. You know, we are selling half of that crop overseas.

If we are going to cut back to just take care of a domestic market, we are in trouble.

Senator **QUAYLE**. I agree.

Mr. **STACKHOUSE**. So this is one of the signals.

I think the other one is that when we send that signal out to the rest of the world, they say, as long as we can beat that price we are going to do it. Joe talked about that.

That is what Canada has been doing. They have been just coming in under us. We have been cutting back and they have been increasing. So that does not answer the question.

We have to have some flexibility to be competitive. We have to get back in the market. If we don't, we are just going to give up market share. If we give up market share, every industry represented here this morning is in trouble, plus all the laboring people of the country, plus the financial people, plus the Government because you are going to eventually be hit with this.

So I see some great troubles if we don't solve it.

Senator **QUAYLE**. Mr. Halow, do you want to add to this?

Mr. **HALOW**. Yes, I really would like to say that I don't feel that the strength of the dollar is really the No. 1 priority, as a matter of fact. In addition to which, I mean there is really actually very little that we can do about the strength of the dollar.

It seems to have a strength of its own. I think the five governments have gotten together and have forced it down a bit, but I am not really sure the extent to which the dollar can go down by itself and stay down.

I feel that U.S. prices, of course, have to be more competitive. In this I agree with Mr. Thompson, who indicated that your support prices, or certainly the loan price has to be lowered to make U.S. prices more competitive in the world market.

Whether or not that is enough I don't really know; but it is obvious that you cannot sell grain if others are selling it at prices much less, lower than yours, particularly considering the fact, also, that the world's quality concepts seem to be changing.

I mean, obviously, for $20 a ton discount you would rather use the lower quality wheat. This is really what the other countries are doing.

I don't think that you can approach the competition of the world with anything other than the difference in the price.

Senator QUAYLE. Mr. Marine, do you want to add anything here?

Mr. MARINE. I think I would agree that the No. 1 priority is a series of symptoms created by Government actions—the high price supports, the strong dollar—all of which, of course, are the result of various U.S. Government actions.

A close second would be a resolution of many of the unfair trade practices that we encounter around the world.

Senator QUAYLE. Could you give us a couple examples of those unfair trade practices?

Mr. MARINE. Well, we have discussed some of them already: the export subsidies from the Common Market. The most important ones to the soybean complex are the various schemes that our South American competitors in Argentina and Brazil use to subsidize the export of their products.

They do it not with an export subsidy, but through differential export taxes which, in effect, keeps the beans at home and forces the products onto the world markets. Those are examples of the kinds of things that I am talking about.

Senator QUAYLE. Do you all agree with what Dr. Thompson concluded when I asked him the question, what big club do we have in the closet that we can use to convince our trading partners and out allies not to do what they are doing?

He indicated that you basically, perhaps, negotiate but, finally, you threaten retaliation. Now, if you threaten retaliation at some time you are going to have to retaliate. I mean, you can only cry wolf so many times.

Do you think that this would be an effective tool, and should we perhaps use it more than we have? Or do you fear that this may lead everybody into starting to retaliate and then we may run into even more problems in the international market?

I would be interested if you think that we ought to perhaps begin to use that club.

Mr. MARINE. Well, as much as you would hate to see the possibility of an all out trade war, basically our trading partners around the world do ignore fair trade. They do retaliate against us. They do use unfair trading practices.

GATT and the dispute settlements there do not work very quickly. About the only thing we have left to do is to fight fire with fire. That is, if they will not play fair then we are going to have to retaliate.

Senator QUAYLE. Does the rest of the panel agree with that?

Mr. STACKHOUSE. Yes.

Senator QUAYLE. Mr. Stackhouse.

Mr. STACKHOUSE. Yes, I would agree with Lockwood and I think he is right on target.

I think one other thing. I was in the outer rim countries this year at the time the Secretary announced the fact that he was going to have some export subsidies or target some things. I will tell you, it got their attention. There is no question about it.

I think we have two things that could be used in this field. One is in the farm bill, and that is to tie those supports to market clearing levels or tie them to something because then the world governments cannot manipulate it.

If they set out there and overproduce as we do in this country, they are going to get the results. They understand that. They cannot avoid it.

As we have been with a fixed situation here in the past couple of years, we have held the price up and they have come in and taken market share. They understand that.

We ought to understand it pretty quick.

The other thing is I think that if we could get into the farm bill this export subsidy part, where if you buy increased amounts, then we are getting back into the competitive role and they cannot beat that one, either. In other words, France cannot use it against us.

I think that is why we have to get in there and say we are going to take some of the surplus grain. If you buy more, we will give it to you at a little better price—the 13/dozen deal—and this will get market share back.

At the same time, it gets this out of our hair and gets it gone so it is not hanging over the market. The market has to begin to work and we have to do some things to make this market work.

We have about killed the infrastructure of trade—and I am talking about the processing industry, I am talking about Joe's group—in the years past by our policies. We have to get that infrastructure strong.

It is not just agriculture. It is that marketing infrastructure that has to be rebuilt. It understands the competitive world. It does not understand all these things that can get in in unfair trade practice because you cannot cope with it.

I think it has been testified here this morning that the Government does not move fast enough. We cannot get them done in GATT. We have to strengthen GATT. We have to do some of those things to strengthen it.

I think that is where we are coming from, is that we have to get their attention. I think we got it with some of the rhetoric out of Washington this year. Now we have to keep it.

We don't dare give that back at this point.

Senator QUAYLE. Mr. Tipton.

Mr. TIPTON. Mr. Chairman, I am a lot more comfortable with the threat of retaliation than I am with retaliation, I suppose. [Laughter.]

I think that the actions that are now being taken, which are very specific by individual items, is a justifiable action.

I have great concern as to the kind of trade wars that might evolve out of a total general kind of retaliatory policy; and I also think that the same thing is of great concern to many of the other countries who are exporting.

So I think the fact of elevating the issue, which we have effectively done in the last few months, is extremely important. Probably we are going to have to get more involved in some retaliatory things.

But it seems to me that what has occurred so far with our willingness to take a very strong stand and say, here is what we are going to do and the way we are going to retaliate, they have been willing to come to the bargaining table in most of the instances and try to work it out.

I hope that would be the result, but I agree with you: I think we are going to have to be ready to actually retaliate. But I think our main emphasis ought to be in solving some of the problems.

In that regard, if I could just comment on one other aspect, I mentioned that we had a meeting with about 30 members out of the European Community and members of our Commission a couple of weeks ago. I was surprised to find two things.

One, in the European Community there seemed to be the same kind of movement toward protectionism as there is in the United States, and that was repeatedly true in each of the countries in the European Community.

Second, they seemed to have the same concern over a retaliatory trade war policy that I think many people would have in the United States as to the actual cost of that. It could be a devastating cost.

I think they were at that position largely because we have already taken some actions and we need to take a few more that, as I say, join the issues so that we can, in fact, have a specific issue to negotiate over rather than kind of the general issue of whether you are subsidizing exports or this kind of thing.

One other point and I will stop. That is I think the GATT—we all have talked about this—needs very substantial revision. One of the things is under the unfair subsidies under the GATT, there is a general kind of language relating to reasonable share of world market.

These are very indeterminate, very unspecific things. The criteria for GATT and the action that needs to be taken when there is a violation needs to be speeded up.

There was unanimous agreement among ourselves and the members of the European Community who were there that that ought to have extremely high priority. I don't think that will solve it and I think that, in itself, will be take quite a while to get worked out; but I do think that that has to have extremely high priority.

Senator QUAYLE. Does everyone else agree that going back and taking another look at GATT should be on the agenda?

Mr. HALOW. I would like to say, though, I feel that in considering negotiations you have to realize that the European Community is under the same type of pressures that the United States is with its agriculture and that there is really very little that we can do that will force the European Community to decrease its exports.

They are already past the point where they can consume their grain internally. They are going to export it somewhere. You know, at one point if they did not export it they would use it internally, decreasing the U.S. market to the European Community; or, if they export it, it would decrease the U.S. market some other place.

The European Community is set on a particular pattern. If the United States threatens to take action against it, it should fairly well realize what type of action it might take essentially that could decrease its own production or, say, divert their productive capacity into other channels and then, of course, carry through with it because idle threats are worse than no threats at all.

We have continued to threaten the European Community with retaliation or with some type of action and, within a few months, then the United States seems to forget about it or hopes that the weather, the drought, in some particular area will take care of agriculture's problem.

But at the present time the agricultural situation is really much worse and threatens to become worse. I think that the United States should consider quite seriously what it wants to say or what it wants to achieve at the negotiation table before it really goes there.

Senator QUAYLE. OK.

Gentlemen, thank you very much for a very fine presentation and a lot of information on how exports affect our employment.

Our final panel is Mr. Ben Fischer, Frank Luerssen, and Mr. Jack Sheehan.

STATEMENTS OF BEN FISCHER, ADJUNCT PROFESSOR OF LABOR RELATIONS AND PUBLIC POLICY, SCHOOL OF URBAN AND PUBLIC AFFAIRS, CARNEGIE-MELLON UNIVERSITY; FRANK LUERSSEN, CHIEF EXECUTIVE OFFICER, INLAND STEEL CO.; AND JACK SHEEHAN, ASSISTANT TO THE PRESIDENT, DIRECTOR OF LEGISLATIVE AFFAIRS, UNITED STEELWORKERS OF AMERICA

Senator QUAYLE. OK. I think I will first call on Mr. Frank Luerssen, who is the chief executive officer for Inland Steel, no stranger to this committee, no stranger to me or to Senator Simon, I am sure.

We welcome you back and look forward to your testimony. Mr. Luerssen?

Mr. LUERSSEN. Thank you for having me, Mr. Chairman. I have a preamble in my paper, which is before you, and I will not repeat which goes to the general situation with respect to steel manufacturing in the United States and in the world.

Clearly, there is a large overhang of steel capacity resulting from foreign countries' desires to move into the steel-making arena, and this is having serious consequences in the United States.

I might point out that the U.S. steel market remains the best steel market in the world and, largely independent of price, foreign countries will attempt to trade steel into this market because this is the place where the prices are highest and the fine market exists.

I would like to talk a little bit about what must be done to regain competitiveness in this situation. I assume that my colleagues will talk about what has happened to the total employment situation in the U.S. steel industry so I will not go into that myself.

To regain full competitiveness in this situation, this new business environment, one has to take into account all of the global factors involved. We must continue to differentiate our products, and that is offer products here that foreigners cannot readily offer, in our market and we must relentlessly pursue cost reduction opportunities.

When you recognize that about 35 percent of our cost is in labor, you have to recognize that to reduce costs we must, in fact, reduce the cost of labor. We are not going to make the kind of inroads into labor costs that we need purely by reducing the hourly wage rates in the labor arena.

We must find new technologies that produce productivity improvements that are substantially above what we can get from existing types of facilities. We are pursuing modernization programs in the industry and in my company with that target in mind.

I would bring to your attention just one opportunity that we have worked on for the past 2 years, and that is a fully automated computer-integrated steel rolling facility which, in effect, will give us three times the labor productivity of the conventional approach.

It is approaches like that which we need to achieve our goal. In addition to that labor productivity, it goes to the differentiation of product as well. So it has a number of advantages.

The problem with all of this is that we now have a weakened steel industry financially in this country and this approach requires a significant amount of investment. Now, we find ourselves in a position, industrywide, where our debt to equity is about equal, and that means that we cannot go out on the debt market at any reasonable rates and borrow money.

Many of us are limited in our equity offerings and so we have to go into very unusual arrangements in order to finance such large investments directed at improving our productivity. That is a difficult problem for us.

We see continuing pervasive imports into this market and I think you probably know that there are concluding negotiations today with the EEC in Belgium. They have not been going along well.

The import figures for September came out and they are up again. Over 2½ million tons were imported into this market in September raising the percentage to 25.2 percent for the year to date.

I would congratulate the Congress on providing the Job Training Partnership Act provisions that have helped us with our employees to get them retrained and repositioned in other jobs. That has been a significant help to us.

That is included in my paper and I think more of that is needed, but that does not go to the root cause. The root cause is that there is substantially unfair traded steel in this market and that essentially we are the only country that has a free, open steel market today.

The President's program has not worked up to this point. It needs additional push and aggressiveness on the part of the administration. I believe that the Special Trade Representative has that view in mind and has that as his goal.

We, however, have not yet been a beneficiary of the President's program.

Thank you very much.

Senator QUAYLE. Well, thank you very much, Mr. Luerssen.

[The prepared statement of Mr. Luerssen follows:]

F. W. LUERSSEN
ORAL STATEMENT TO U.S. SENATE SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY
OCTOBER 31, 1985

Mr. Chairman, my name is Frank Luerssen. I am Chairman and Chief Executive Officer of the Inland Steel Company. Headquartered in Chicago, Inland is the nation's fourth-largest integrated steel producer. Its one plant, the Indiana Harbor Works in East Chicago, Indiana, is the largest in North America.

I welcome the opportunity to discuss the effect of trade on employment and productivity, because trade-related changes have had a definite negative impact on Inland and its people. During the next several minutes, I will discuss those and other changes and how we're coping with them.

My premise is that we bear the responsibility for our own future. In line with that, we're working aggressively to improve our competitiveness in today's dynamic world market. Clearly, however, as I'll explain later, there is a role for government programs to help address the inevitable fallout of adapting to such "megachanges."

Let me briefly mention some of those changes.

One is the growing usage of competitive materials. Another is the continuing shift of manufacturing and population away from traditional geographic areas. Further, we are witnessing a decline in "steel intensity" in our economy.

The most important and sweeping change, however, has been the overdevelopment in world steel capacity and its effect on trade.

After World War II, barely 30 nations produced steel commercially, and the output of their mills fell short of meeting the growing world economy's needs. Today, though, more than 90 nations have indigenous steel industries--many of them built or significantly expanded during the expansion days of the early 1970s, when steel demand far outpaced supply.

The net result of this overdevelopment is that the world now finds itself with perhaps 150 million tons of excess steel capacity, with little prospect for renewed demand growth.

Since much of this excess capacity exists in nations where there is significant government control or subsidization of the steel industry, there has been great pressure to export excess tonnage, often at prices well below "fair market" value.

(I am aware, of course, that some observers downplay the role unfair trade practices have played in steel's current problems, instead citing the industry's alleged shortcomings. It's impossible to address that complex issue in the time allotted me today, but let me state for the record that my industry's productivity figures clearly indicate that we are competitive with world producers.)

Let me cite some statistics that give you a better idea of the trade problem's magnitude:

*Imports today capture more than 25 percent of the domestic market, up from 16.3 percent as recently as 1980.

*As a result of that import penetration and other factors, steelmaking capacity in the U.S. has fallen from some 160 million tons in the 1970s to roughly 134 million tons today. It's estimated that, by the end of this decade, capacity could fall further, to 100 million tons.

*Partly because of improved productivity, but primarily because of lost volume, employment in the steel industry is at a modern day low. It fell to 202,000 in August, compared to more than half a million as recently as 1974.

*Financial losses have been the inevitable result. Since 1981, the industry's losses have totaled more than $7 billion, and stockholder equity has fallen by $7 billion. The recovery, in large measure, has passed us by.

Despite its aggressive investment program and status as a low-cost producer, Inland has not been immune from these problems. We have lost approximately $365 million since 1981, are reducing our capacity by 30 percent, and have reduced steel employment from a high of nearly 25,000 in the late 1970s to slightly more than 16,000 today--with more reductions in the offing.

Facing these changes, the American steel industry is restructuring to compete in a market that may well never see demand levels anticipated in the past. It is committed to achieve a level of profitability that will permit necessary investment and will provide secure employment for its people and a fair return for its owners in the private sector.

Underlying that restructuring is an awareness of political and economic reality. Although better enforcement of trade laws would have led to a larger, more productive, and more competitive industry today, the factors that mitigated against strong enforcement still exist and still color national policy decisions.

It's also inevitable that nations with very depressed labor rates (such as Korea, where steelworkers earn approximately $3 per hour) and with debt-induced pressures to export will continue to sell in the U.S. at prices that bear little relation to the cost of production.

Beyond that, we understand that our customers face the very same competitive pressures that we do. They must either reduce their domestic manufacturing costs significantly or use more offshore materials, parts, assemblies, or products. (Last Monday's Wall Street Journal carried an extensive report on the foreign sourcing plans of one of the steel industry's largest customers, the auto industry.)

In view of this, my company must regain full competitiveness in a new business environment of global dimensions. We must continue to differentiate our products and relentlessly pursue cost-reduction opportunities. With labor constituting 35 percent of our costs, there must be a sharp reduction in that segment, which translates into the need for a major improvement in labor productivity.

We've already improved productivity by more than 20 percent, but another substantial increase is required to achieve full competitiveness--an increase much more than we can attain through improvements in existing operations.

Clearly, our investment strategy must focus on opportunities to sharply reduce costs and boost the quality of our products. Such projects as two new continuous casters, an electrogalvanizing coating line, vacuum steelmaking, and a proposed continuous cold rolling mill are examples of note. The latter promises three times the productivity of conventional facilities, unmatched product uniformity, 10 percent higher product yield, and a reduction of coil processing time to less than one hour, compared to the normal 12 days.

Obviously, we need a broader range of opportunities of that type, in addition to the financial resources to implement them, if we are to reach our competitive potential.

The key element of that is to counteract the differences in wage rates between, for example, the Pacific Rim countries and the U.S. by productive improvements attained through automation and continuous processing. This will mean further displacement of jobs at Inland and throughout the industry over time. And time is what we need to implement the forefront technology and to attain the financial revitalization necessary to carry out appropriate investment programs.

That's one reason, I should add, why the President's voluntary steel restraint program--which provides a five-year "window of opportunity"--is so essential. Coincidentially, today is the deadline for a new EEC arrangement, which the Office of the Special Trade Representative is working on so diligently and which we need so badly to relieve predatory trade practices.

Mr. Chairman, during the last several minutes, I've described the difficult competitive environment facing Inland and the industry, and I've explained that substantial productivity improvement is necessary to survive in that environment. I've also suggested that competitiveness will inevitably mean fewer people in the domestic industry.

As a result, I strongly support programs such as the Job Training Partnership Act, which help displaced employees redirect their careers and rebuild their lives. They are highly cost-effective and deserve continued funding, even in an era when we accept the need for reduced federal expenditures.

As this country's industries adapt to world competition, we must help the displaced find new livelihoods. If not, we will pay the cost in welfare programs.

At the Inland Steel Company, the JTPA-supported Job Search Center, jointly sponsored by Inland and United Steelworkers Local 1010, has been in operation since February of this year. It has served nearly 1000 displaced Inlanders and, so far, some 45 percent of the participants have either found jobs or entered retraining programs. (That 45 percent figure does include some who were recalled to Inland jobs.)

The $1 million funding played a major role in expanding the scope of the Center's program, which includes personal and career counseling, testing, job search training, ongoing support, retraining referral, and--for those with appropriate aptitudes--entrepreneurship assistance.

We have applied for an additional $500,000 in funding to carry us through September of 1986, to serve those affected as Inland completes its plan to reduce capacity by 30 percent.

I strongly urge you to continue this vital program. The Inland Steel Company, along with many firms in the heavy manufacturing industries, are restructing vigorously to meet the challenge of world competition. This restructuring will, in coming years, mean increased numbers of dislocated employees. Helping them adjust will require continued industry/government cooperative efforts of the type exemplified by the Job Training Partnership Act.

Thank you.

Senator **Quayle**. The second witness is Mr. Jack Sheehan, who is the assistant to the president and the director of legislative affairs for the United Steelworkers of America.

Mr. Sheehan, thank you very much for coming. We look forward to your testimony.

Mr. **Sheehan**. Thank you, Mr. Chairman. Indeed, I don't think I will be saying anything different than our industry representative.

I have written out some comments and, therefore, I would like to page through them as I give this testimony.

Senator **Quayle**. OK.

Mr. **Sheehan**. First of all, I should indicate that employment in the steel industry has been consistently declining over a long period of time. We are aware that there is just a continuous downturn in steel employment.

However, the ravages caused by—and we want to emphasize this—a failed economic policy and an ineffective trade policy have, in the recent years, accelerated the job loss. There is no doubt, also, that deep structural changes are occurring in the steel industry.

Under such circumstances, there is a need for a period of stability for these changes to evolve without having devastating social implications. We are, for instance, aware that the European Common Market is not reluctant to apply a series of government measures to assist their steel firms in the restructuring process.

As a matter of fact, these measures include import relief—these are external measures—and they also employ internal measures—production control and price control—so as to make their market more favorable for the readjustment process and accumulation of capital for investment.

Yet, in the United States, the steel market conditions remain turbulent. So far, this year, we have experienced a decrease in steel demand from last year of almost 6 percent. Recovery has not come to the steel industry and we are now 6 percent below where we were last year.

According to the Labor Department, employment is almost 13 percent below last year's level. So steelworkers very much question either of those two policies: the economic or the trade policy.

For an 8-month period, production and maintenance jobs dropped 187,000 workers.

Now, the import penetration remains very high, over 25 percent of consumption. The import restraint program, initiated by the President certainly, perhaps in hindsight, had one fatal flaw—it has a number of them, but at least one that I should mention this morning: it did not begin immediately when announced.

Now, the program is one which required that individual country restraints be negotiated over a period of time. That is understandable. It takes some time to negotiate arrangements.

However, during the negotiating period imports skyrocketed. For instance, in January of this year, 3 months after the program had begun, imports reached 31 percent of consumption.

Recognizing that there might be this rush to the American borders with imports, it would have been preferable for the program to begin with a moratorium on imports pegged to the previous level of imports. I noted in today's paper that if the Common Market does not extend its agreement the Government might very well embargo those steel imports until such time as they come to a renegotiation of the agreement.

We certainly would encourage them to do so because our experience under the VRA up to now is that imports poured in during this negotiation period and now we have to backtrack and offset those imports. Nevertheless, we are aware that the voluntary restraint agreements are retroactive to October of last year, and that when fully effective will require the offsetting of previous high levels or front loading of steel imports.

Hopefully, the 5-year arrangement will provide the stability in the trade market needed for the industry to engage in the restructuring shakeout. So far, however, the advantages of the steel import relief have not been forthcoming, as mentioned.

Furthermore, the high levels of steel imports have been accompanied by unbelievable trade deficits. I quote from the Commerce Department indicating that steel-consuming industries also have been subjected to import penetration that has an indirect impact on steel jobs because we are not making steel for domestic users of steel and, again, the jobs are lost in the steel industry.

Mr. Chairman, I quote in the testimony from a paper which was done by our research department some time ago in which we indicate that the drop in steel jobs, in the 1970 to 1980 period, was dropping at the rate of 3 percent a year. In the 1980's, we are now witnessing a drop of almost 14 percent annually.

So it has been continuously accelerating. I would like to have that paper introduced into the record at this time.

Senator **QUAYLE**. It will be.

Mr. **SHEEHAN**. I also note the fact that the Congressional Research Library, in a paper prepared by Linda LeGrande, makes reference to this precipitous decline in jobs in the 1980's and discusses the impact that this is having not only upon the workers that are severed from the industry, but those that remained with the industry.

When you are reviewing the impact of trade on employment, you must look at it also in terms of its impact on those who remain in the steel industry where there is a need of upgrading of skills. Import penetration is accelerating a change in the skill situation in the industry.

I have also presented a table that indicates the distribution of the steelworkers within the specific steel product lines. I think if you looked at that table compared it with import penetrations in these lines and with investment in these lines, you might begin to see where the future declines in steel imports may be occurring.

Almost 30 percent of our steelworkers operate in the front end of the steelmaking operation: in other words, the making of steel. Yet, we are now aware of the fact that there is, apparently, a tendency to import semifinished products—slabs, if you wish.

What would that do? It would reduce the front end of the steelmaking process.

I quote, in the testimony, a statement on this from an official of the United States Steel Corp. in which the representative said: "The marketplace for steel within the United States would accept a finishing operation in this country with remote steelmaking" By that, he means importing slabs.

"The economics are so powerful that if we can overcome national chauvinism, it is almost as sure as death and taxes." I am indicating to you as a steelworker representative this morning that this is a very serious issue if we are finding the front end of the steelmaking operations being subjected to import penetrations.

I would like to indicate that one aspect of the import situation is that the union has been cooperating with the industry with regard to the retraining or the readjustment of workers that are severed from the industry.

We would note that 1 percent of net cash flow must be committed to the retraining of workers who will not return to the industry. It is a program, Mr. Chairman, that is absolutely necessary.

I would like, at this occasion, to indicate that we do utilize something that you have been associated with: namely, the JTPA program. The Government has committed or earmarked almost $10 million for a steel-specific program. The 1-percent set-aside from the private sector is also involved.

In addition, Mr. Chairman, there is a very close relationship with the TRA Program where income maintenance provides a worker who enters into a training program income maintenance.

We need to have all these ingredients locked together and, indeed, we want to make sure that the 1-percent set-aside is directed, at least on a priority basis, to those who are not going to return to the steel mills currently.

I have attached to this report two papers, one by the research department of the steelworkers on the historic downturn in steel employment and one from the Congressional Research Service on the change in the employment picture in the 1980's.

Thank you.

Senator QUAYLE. Thank you very much, Mr. Sheehan. Your entire testimony and the supplemental items will be included in the record in their entirety.

[The prepared statement of Mr. Sheehan and the research paper referred to by him follow:]

STATEMENT

OF

JOHN J. SHEEHAN, LEGISLATIVE DIRECTOR

UNITED STEELWORKERS OF AMERICA

Mr. Chairman, Members of the Subcommittee, my name is Jack Sheehan, and I am the Legislative Director of the United Steelworkers of America.

Employment in the steel industry has been consistently declining over a long period. However, the ravages caused by a failed economic policy and an ineffective trade policy have in the recent years accelerated the job loss. There is no doubt that deep structural changes are occurring in the steel industry. Under such circumstances, there is a need for a period of stability for these changes to evolve without their having devastating social implications. We are, for instance, aware that the European Community is not relutant to apply a series of government measures to assist their steel firms in the restructuring process. These measures include trade relief and internal arrangements to assure more favorable market conditions in which the various national steel companies can undertake the task of becoming world class steel mills.

Yet in the United States, the steel market conditions remain turbulent. So far this year we have experienced a decrease in steel demand, about 6% below last year's level. According to the Department of Labor, production employment is almost 13% below last year's level. For the 8-month period, production and maintenance jobs dropped to 187,000.

Import penetration remains high -- over 25% of consumption. The import restraint program, initiated by the President, had a fatal flaw: it did not begin immediately when it was announced. Admittedly, it is a program which required that the individual country restraints be negotiated over a period of time. However, during the negotiation period, imports skyrocketed. For instance, in January of this year -- three months after the program began, imports reached 31% of consumption. Recognizing that there might be this "rush to the American borders," it would have been preferable for the program to begin with a moratorium on imports pegged to the previous year's level until the negotiated settlements were arranged.

Nevertheless, we are aware that the Voluntary Restraint Agreements are retroactive to October 1984 and that when fully effective, will require the offsetting of the previous high levels -- or front loading -- of steel imports. Hopefully, the five-year arrangement will provide the stability in the trade market needed for an industry engaged in a restructuring shakeout.

So far, however, the steel import relief has not been forthcoming. Furthermore, the high levels of steel imports have been accompanied by the unbelievable trade deficit of

$123 billion in 1984 -- a deficit which is expected to increase to $150-160 billion in 1985. In 1984, U.S. manufactures trade deficit grew by $50 billion. According to the Commerce Department:

> "The decline in manufactures performance was broadly based. Trade balances worsened in 15 of the 20 major classes of manufactures...The 1984 capital goods surplus of $13 billion was about one-fourth that of 1981."

These drastic swings also affect steelworker jobs as steel-consuming manufacturers cutback on their production due to import penetration.

The USWA is aware that employment trends in the steel industry have been on a consistent downward slope. In 1981, our Research Department analyzed this factor and indicated that the average annual decline since 1950 amounted to a minus 1.9%.

Period	Empl. Decline	Annual Rate
1950-1960	78,200	-1.6%
1960-1970	41,900	-0.9%
1970-1980	112,500	-3.1%
Total Decline	232,600	---
Average Rate	---	-1.9%

The report especially noted the high rate of the employment decline in the 70's at 3%.

However, a recent report by the Congressional Research Service, prepared by Linda LeGrande, indicated that "...decline in employment among the industry's blue-collar factory workers...became a precipitous decline in the 1980's at 14.5% annually." Average employment, according to AISI, in 1980 was 291,483 as compared with the July 1985 workforce of 150,900 representing a decrease of 48% or 140,583 workers.

Additionally, the type of steel imports is having an uneven impact on the workforce. Because there are higher levels of certain kinds of steel mill items, that sector of jobs is more affected. Thus, for example, in 1983, while overall imports were 20.4% of consumption, imports of semifinished products reached 48.4% and pipe/tube imports were 49%. There is an expectation that steel firms will begin to shift their production to high-value items. If this occurs too abruptly, there will not be an ability for the workforce to adjust to the change through attrition.

A review of the levels of imports and amounts of investment in specific product lines will reveal the vulnerability of certain categories of steelworkers who, according to a recent International Trade Commission report, are distributed accordingly:

	#(000)	%
cokemaking	12.4	5.8
ironmaking	14.7	6.9
steelmaking	43.3	20.2
finishing	143.7	67.1
- sheet/strip	86.2	40.3
- bars	20.0	9.3
- pipe & tube	14.3	6.7
- plate	7.4	3.5
- structural	7.2	3.4
- wire	5.8	2.7
- R/R	2.6	1.2

An ominous trend is the high importation of semifinished products, e.g., slabs which directly impact upon the steelmaking part of the steel industry. As more companies try to arrange the purchase of offshore slabs, or enter into joint ventures with overseas producers, then we can expect to witness a retrenchment in the front end of steel mill activity. Already modernization investment in the continuous casting process which improves the yield of raw steel from 74% to 80% will permit the reduction in raw steel capability from the current level of 135.3 million tons per year to 115 million tons by the end of 1989.

Some officials are advocating that the American steel industry become primarily a finishing operation and import very high levels of raw steel. Thus, for example, Tom Graham of U. S. Steel stated:

> "The marketplace for steel within the U.S. would accept a finishing operation in this country with remote steelmaking. The economics are so powerful that if we can overcome national chauvinism, it's almost as sure as death and taxes."

Incidentally, the negotiation of an import arrangement with the Common Market is presently an issue of dissension between EEC and USA negotiators. Approximately 30% of steelworkers are engaged in front end production and would be disproportionately affected by any abnormal swings in the semifinished share of steel imports.

These rapid import penetrations are, of course, having enormous job impacts. As the industry responds to the foreign competition, we are expecting an increasing amount of modernization investment -- if the voluntary restraint becomes effective and market conditions improve. However, for workers remaining in the industry, this prospect poses a challenge to the upgrading of their skills. According to the CRS study:

> "Although not in as precarious a position as the dislocated steelworker, those remaining...have lost some of the employment stability they once enjoyed. Their job may not have been eliminated by modernization but rather, may now be changed by it."

The immediate problem we are facing on the employment front is the plight of the displaced steelworkers. In a recent report to Congress entitled, Causes and Remedies For Displacement of Steelworkers, the Department of Labor presents data on those workers "...who live in areas where the local labor market does not offer a bright future."

Asmentioned, the government is in the process of negotiating import restraints which will cover almost 80% of steel imports. If Canadian imports remain stable or decline somewhat, approximately 90% of steel imports will be moderated. However, the Congress, in recognizing the Administration's steel progam, insisted that there be a quid pro quo, namely, that the industy commits net cash flow to modernization of steel facilities and adjustment of displaced workers. The USWA is strongly supportive of that statutory obligation.

As a union, we have engaged in programs to assist the steelworker who will not return to the steel mills. In this effort, we are joined with the steel industry in establishing Dislocated Steelworker Centers designed to return the worker to gainful employment. For the union, this is a painful endeavor because our members are strongly committed to steel employment. Furthermore, as the DOL report states, when Steelworkers find a job, "...they typically have to accept a decrease in their pay." There is a substantial lowering of their standard of living.

Since our emphasis has been upon the displaced worker, USWA supported the congressional intent that the 1% adjustment setaside of steel firms' funds be allocated on a priority basis to the unemployed. Accordingly, Congressman Pease, in a floor comment, explained the intent:

> It is our intention in this bill that those bluc-collar employees who are permanently separated from the company or on extended layoff should be the prime recipients of the funds generated by the retraining earmark. It would defeat the purpose of the 1% earmark of net cash flow for retraining if these funds were

> diverted to defray the wage and benefits costs of a company that is in the process of retraining and upgrading the skills of its active work force. These activities are expected to continue; however, the first level of commitment to retraining is to those workers who are separated from the company.

With regard to these joint labor-management worker adjustment activities, I would like to make a few points:

1. We do utilize the JTPA programs. DOL also set aside $10 million for a steel sector approach.

2. We also depend upon the TRA program, especially since it is the only government system which provides income maintenance while in a training program.

3. The Steel Import Stabilization Act requires the major steel companies to commit 1% of net cash flow to the readjustment process. It was the intent of Congress that these funds be utilized on a priority basis for displaced steelworkers.

4. The Department of Labor, in its report to Congress, adopted a recommendation of the Steel Advisory Committee, a tripartite forum establishd by the President, that there be an *ad hoc* tripartite committee to "act as an industry oversight group to enhance the administration of a model steel adjustment program."

USWA urges that while we address the economic and trade problems assailing the industry that we take positive steps to assist those Steelworkers who are now the victims of these policies.

April 20, 1981

TO: International Officers and District Directors

FROM: Edmund Ayoub, Assistant to the President and Chief Economist

SUBJECT: STEEL IN THE SEVENTIES - VI
Employment in the Steel Industry

In the past quarter century or more we have observed a steel industry in massive decline as a source of employment for American workers. While there have been cycles of recovery and decline in employment, the long-run trend has been, and continues to be, decidedly downward.

Collective bargaining has been successful in mitigating the hardships endured by the unemployed; but it has been singularly unsuccessful as a method for avoiding job displacement, or for job creation. Historically, the method of collective bargaining in America has been a vehicle for improving wages and working conditions, not for promoting economic or industrial growth. In the steel industry, the broadening scope of collective bargaining over the years has yielded creative responses to the issues of declining employment and job protection; but more fundamental developments have worked against either stable or increasing employment.

Employment in steel has been affected by technology, cyclical developments, and steel imports. Each factor impacts on steel employment in varying degrees at various times. It is not possible to distinguish with great accuracy the influence of each at any given time. Technology has certainly been an important factor in the long-run decline of steel employment. However, within the declining trend there have been cyclical recoveries during which employment has temporarily increased. Moreover, there have been periods of economic recovery in the national economy when steel employment might have increased to a greater extent except that higher steel imports prevented the rise.

Long-Term Employment Trends

The long-run decline in steel employment has been dramatic. The peak year for production and maintenance (P&M) employment was 1953, when a work force of over 571 thousand was reached. In the same year, salaried employment exceeded 111 thousand. For the next decade and one half, the trends were divergent. The P&M level declined, while salaried jobs were generally on the rise. Salaried employment peaked at 134.5 thousand in 1968.

Table 1 presents employment data for 1950, 1960, and for the past decade. These data are published by the American Iron and Steel Institute.* While the decline itself has been relentless over the long period, the rate of decline shows significant variation.

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* AISI employment data are adjusted to 100%, since the AISI coverage is not complete. Over the period reviewed, AISI coverage has ranged from 92% to 96% of the industry.

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The following table makes the point rather dramatically, for P&M employment.

Period	Employment Decline	Annual Rate
1950-1960	78,200	-1.6%
1960-1970	41,900	-0.9
1970-1980	112,500	-3.1
Total Decline	232,600	--
Average Rate	--	-1.9%

A sharp annual rate of decline took place in the 1950s (-1.6% per year average). The decline continued in the 1960s, but at a slower rate (-0.9% per year average). The fastest annual rate of decline occurred in the decade of the 1970s (-3.1% per year average). The average annual decline for the entire 30-year period amounted to -1.9%, a total in excess of 230 thousand P&M employees.

The year 1980 was a particularly disastrous one for P&M employment, with a drop of over 64 thousand. This sharp, single-year drop was exceeded only in the recession years 1953-54 and 1957-58, when P&M employment fell 70 thousand and 102 thousand, respectively. In the recession of 1974-75, P&M employment dropped about 52 thousand. After each recession, employment temporarily recovered.

It is reasonable to assume, therefore, that there will be a cyclical upswing in employment from the average 1980 level of 307.4 thousand. However, it is equally reasonable to assume that the upswing will be temporary, and that the longer-run forces of employment decline will persist. A massive modernization program in steel will moderate the rate of decline, and at some point perhaps stabilize employment levels. Moreover, the employment decline could well be arrested for a time were we to enter a period of buoyant steel demand later on in the 1980s, as was discussed in an earlier memorandum in this series.

Salaried employment trends in the steel industry showed a dual trend in the 30-year period under review. This is shown in the following table.

Period	Employment Change	Annual Rate
1950-1960	+ 29,400	+ 2.7%
1960-1970	+ 8,500	+ 0.7
1970-1980	- 20,800	- 1.7
Total Change	+ 17,100	--
Annual Rate	--	+ 0.6%

For salaried employees, employment trends were upward in the 1950s and 1960s, although at sharply varying rates. There was a rapid addition of more than 29 thousand salaried workers in the 1950s, and an annual rate of growth of 2.7%. The annual rate of growth slowed to 0.7% in the 1960s. The 1970s saw a reversal of the trend, with a decline of nearly 21 thousand salaried workers, or an annual rate of decline of 1.7%. About two-fifths of the decline occurred in 1980. The average annual increase for the 30-year period amounted to 0.6%, a total of nearly 18 thousand salaried employees.

The large 1980 drop in both P&M and salaried employment accentuates the sharpness of the 10-year decline (1970-1980).

If we measure the annual rate of decline for the 9-year period (1970-1979), the rate for P&M employees was -1.3%, and for salaried employees -1.1%, compared with the -3.1% and -1.7%, respectively, as shown in the two tables above. The reason for the significant difference in the two P&M rates is that P&M employment increased by nearly 15 thousand in 1979 from the previous year. Clearly, however, the P&M employment decline in the 1970s was well in excess of the long-run 30-year rate of decline.

The divergent trends in P&M and salaried employment in steel during most of the period since 1950 profoundly affected the proportions of the two groups in the steel labor force. This is readily apparent from Table 1. From 85.0% in 1950, P&M employment as a proportion of total employment in the industry fell to 78.7% in 1960, 75.9% in 1970, and 73.2% in 1980. Conversely, the salaried proportion rose from 15.0% in 1950 to 26.8% in 1980. Salaried overhead costs have apparently exerted a disproportionate rise in the industry for a considerable length of time.

Cyclical Employment Trends

Employment cycles in the steel industry are influenced by changes in economic and business activity in the economy as a whole, as well as changing market patterns of steel demand. There has also been a distinct cyclical pattern of employment associated with contract negotiations. Fluctuations in steel imports also affect employment in the domestic industry. Steel imports show a cyclical pattern particularly when associated with our "negotiating cycle".

Over the past 15 years (1965-1980), nine distinct employment cycles can be identified. The cycle peaks and cycle troughs are shown in Table 2, along with data on duration of each cycle and employment change. The employment data used are for production workers.*

Table 2 requires considerable study for a fully rewarding analysis of cyclical employment trends in steel. I will summarize a few of the more obvious conclusions that can be drawn from the table.

1. Employment peaks tend to appear at mid-year, and generally at one to two year intervals. Employment troughs generally appear in the final quarter of a given year.

2. Of the 9 employment peaks, 4 occurred in negotiating years (1965, 1968, 1971, and 1977), and 4 occurred in years that preceded periods of economic slack or recessions (1966, 1969, 1973, and 1979). The final peak, July 1976, is unclear and might simply be a wave inside a longer cycle.

3. Negotiating year peaks were followed quickly by troughs, after 3 to 5 months' duration. (Note that a "negotiating cycle" did not appear in 1974, the first time the Experimental Negotiating Agreement was in effect. This was a relatively stable employment period within the "peak to trough" segment from July 1973 to October 1975.)

4. The peaks that preceded slack or recession years were followed by considerably longer periods of downturn before reaching a trough -- 14 to 27 months' duration.

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* U. S. Department of Labor (DOL) employment data (SIC 3312) are used in this analysis, rather than AISI data. The AISI omitted publication of monthly employment data for a 4-1/2 year period from 1966 to 1970. DOL data for production workers are higher than AISI data for P&M workers, due to definitional differences.

5. The "peak to trough" segments resulted in employment declines that were greater than the subsequent "trough to peak" employment increases. In other words, in each of the peak years since July 1965, employment levels reached their heights at successively lower levels. (The only exception is for the cycle that began June 1977.) There is apparently an employment shakeout during the course of a cycle. The final column in Table 3 shows the percentage decline at each successive peak.

Source of Future Employment Decline

It is highly unlikely that the employment decline in the steel industry will reverse itself over the long-run. At best, there will be periods of temporary increase during periods of business cycle recovery or negotiating cycle recovery -- to the extent the latter might again become a factor in employment swings.

That being the case, where will further long-run employment declines take place? The answer can only be a speculative venture at most, and then an imprecise one.

If further employment drops occur as a result of plant shutdowns, then the source of disemployment can run the gamut of marginal or otherwise inefficient facilities. If an open-hearth shop shuts down, then manhours will decline at that source; if a wire mill, then at that source, and so on.

There is no way of anticipating disemployment of this sort. We do not have complete knowledge of all of the marginal plants or operations; nor are we privy to managerial decisions as to which will be set aside and which will be refurbished or modernized.

If we were to speculate about the source of decline based upon current technology needs, our focus would be sharpened. That is, assuming that the steel industry does intend to spend considerable amounts of capital on improving technology and productivity.

Table 3 shows a breakdown of manhours of work, by steel process, for 1978. This was published in the AISI's 1980 study entitled Steel At The Crossroads. It is the first time to my knowledge that such information has been made public. Unfortunately, we do not have a base year earlier than 1978 with which to compare manhour trends; but some good judgements can be made.

In Table 3, the manhours published in the AISI study have been calculated to show percentages of manhours by steel process. Well over one-half of steel manhours are in tail-end processes. This is consistent with what we know, by indirection, about where the bulk of capital investments have or have not been made.

In the 1960s, the steel industry spent $1.6 billion per year for capital improvements. Most of it was front-ended. That is, blast furnaces, BOFs, and electric furnaces. Don Barnett, chief economist for the AISI, asserts that manhours per ton in front-end technology were significantly reduced during the 1960s, and that little improvement in productivity can be derived from this source in the future. While capital expenditures in constant dollars were lower in the 1970s than in the 1960s, much of it continued to go into front-end technology. Blast furnaces, for example, are fewer in number today than a decade or more ago, but capacity is higher. Again, it is clear from the data that BOFs continued to replace old open-hearth furnaces during the 1970s. Only about 11.5% of ingot production is still accounted for by ~~open-hearths~~. Continuous casting will come on stream strongly in the years ahead, and this will displace ingot casting, blooming mills, soaking pits, and the like, and reduce manhours in those processes.

However, the greatest neglect, in terms of technology, has been in areas such as rolling mills, materials handling, and finishing facilities. These are areas of potential productivity growth and cost savings; and it would seem reasonable to assume that manhour improvements will take place in these tail-end processes in the future.

Reference is made here to the magnitude of potential decline in employment. There will continue to be improvements made in front-end technology, most notably coke oven improvements, as well as in furnace technology. And there may well be some reconstruction of existing facilities to improve the flow of technological efficiency. But if the industry is to make the necessary improvements in productivity that are needed for increased competitiveness, the future manhour reductions will be in the finishing end of steel processes.

Summary

Steel is an industry in ~~massive decline~~ as an employment source. Over the past 30 years more than 230 thousand P&M jobs have been lost, and there has been only a modest growth of salaried jobs over the same period. Employment in the steel industry is at a level consistent with that of the Great Depression of the 1930s. Steel imports, improved technology, cyclical shakeouts, and competition from substitute products are some of the causes of the employment decline.

P&M employment declined at varying rates over the past three decades. The rate of decline was fastest in the most recent 10-year period. Salaried employment showed an overall modest increase over the 30-year period, although there was a decline in the most recent decade.

Nine employment cycles can be identified in the period 1965-1980. They fall into distinctly economic cycles and "negotiating cycles". With a single exception, each successive peak in an employment cycle resulted in a lower level of employment.

Barring a major and sustained increase in steel demand over a long period of time, it is likely that steel employment will continue to decline, though possibly at a decelerated rate. Assuming that substantial increases in capital expenditures are forthcoming, much of it will be directed toward tail end processes in the industry. Major manhours reduction, therefore, will likely be in the finishing facilities in steel. The notable exception will be reductions which derive from large expenditures for continuous casting facilities.

Table 1

Steel Industry Employment, 1950, 1960, 1970-1980
(thousands)

Year	P&M	Salaried	Total Employment	% P&M	% Salaried
1950	540.0	95.5	635.5	85.0%	15.0%
1960	461.8	124.9	586.7	78.7	21.3
1970	419.9	133.4	553.3	75.9	24.1
1971	386.3	126.6	512.9	75.3	24.7
1972	379.2	119.1	498.3	76.1	23.9
1973	409.2	120.6	529.8	77.2	22.8
1974	409.6	124.1	533.7	76.7	23.3
1975	357.8	123.4	481.2	74.4	25.6
1976	356.9	121.2	478.1	74.6	25.4
1977	355.2	121.0	476.2	74.6	25.4
1978	357.0	115.8	472.8	75.5	24.5
1979	371.7	120.9	492.6	75.5	24.5
1980	307.4	112.6	420.0	73.2	26.8
Annual Rate (compounded)					
1970-80	-3.1%	-1.7%	-2.7%	—	—

SOURCE: American Iron and Steel Institute (adjusted to 100%).

Table 2

Employment Cycles, Basic Steel Industry, 1965-1980
(employment in 000s)

PEAK TO TROUGH	Number of Months	Employment Decline	TROUGH TO PEAK	Number of Months	Employment Increase	% Change Peak to Peak
Jul 1965 - Nov 1965	4	70.8	Nov 1965 - Jul 1966	8	58.6	-2.4%
Jul 1966 - Oct 1967	15	54.0	Oct 1967 - Jul 1968	9	43.1	-2.2
Jul 1968 - Oct 1968	3	79.0	Oct 1968 - Jul 1969	9	68.3	-2.2
Jul 1969 - Nov 1970	16	59.2	Nov 1970 - Jun 1971	7	26.9	-6.9
Jun 1971 - Nov 1971	5	93.2	Nov 1971 - Jul 1973	20	83.7	-2.2
Jul 1973 - Oct 1975	27	80.8	Oct 1975 - Jul 1976	9	42.7	-8.9
Jul 1976 - Dec 1976	5	31.3	Dec 1976 - Jun 1977	6	28.8	-0.6
Jun 1977 - Nov 1977	5	30.3	Nov 1977 - Jun 1979	19	35.4	+0.2
Jun 1979 - Aug 1980	14	89.9	Aug 1980 - ---	--	--	--

SOURCE: Compiled from data published by the U. S. Department of Labor

Table 3

Steel Industry Manhours, by Process, 1978

	Manhours (millions)	Percent Manhours
Coke Batteries	46.4	5.2%
Blast Furnaces	84.5	9.5
Steel-Producing Shops		
Electric	37.3	4.2
Open-Hearth	23.1	2.6
BOF	34.0	3.8
Strand Casters	15.0	1.7
Ingot Casting	32.8	3.7
Primary Mills	61.0	6.8
Finishing Mills	490.0	54.9
Selling, General and Administrative	58.8	6.6
Inventory Increase		
(equivalent finished product)	9.5	1.1
Total Manhours	892.4	100.0%

SOURCE: Steel At The Crossroads, published by the American Iron and Steel Institute, 1980.

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EMPLOYMENT IN THE STEEL INDUSTRY: THE SHAPE OF CHANGE

Prepared at the Request of
the House Committee on Science and Technology
Subcommittee on Science, Research, and Technology

Linda LeGrande
Analyst in Labor Economics
Economics Division
July 10, 1985

ABSTRACT

Modernization of the U.S. steel industry means a permanently reduced workforce, increasingly composed of more educated and skilled workers performing non-routine tasks, which are less susceptible to encroachment by new technologies. Employment security among current workers is tenuous as they will need to adapt their skills to those required by the new, automated steelmaking processes in order to retain their jobs. For dislocated steelworkers, prospects of finding new jobs that offer comparable earnings and benefits are dim. The one bright note for steelworkers is that most job losses are likely to already have occurred, so that the next 10 years should be less traumatic than were the early 1980s.

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Editorial assistance in the preparation of this report was provided by Marietta L. Sharperson and John Williamson.

EMPLOYMENT IN THE STEEL INDUSTRY: THE SHAPE OF CHANGE

INTRODUCTION

The domestic steel industry -- buffeted by structural forces and cyclical swings -- has become one of the leading examples of what is commonly referred to as a declining industry. Between 1947 and 1983, steel output rose at an average rate of 0.7 percent per year. 1/ In the 1980s, a worldwide recession, expansion of other nations' steel capacity, and the increasing supply of comparatively low-cost foreign steel to the U.S. market combined to depress domestic steel output by 12.3 percent per year on average. Similarly, the periodic post-war decline in employment among the industry's blue-collar factory workers, at an annual average rate of 1.4 percent, became a precipitous decline in the 1980s, at 14.5 percent annually.

To turn this situation around, U.S. steel producers have sought ways to make themselves more competitive with foreign producers. They have permanently shut down operations and closed entire plants that they deemed to be inefficient. Management and labor have negotiated cost-saving collective bargaining agreements. Steelmakers have introduced new technologies to make their facilities more productive. These actions contributed to the 1980s' upturn in output per hour for production workers to 3.1 percent annually. 2/ In contrast, over the

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1/ U.S. Bureau of Labor Statistics. Unpublished data.

2/ Ibid.

entire post-war period, productivity growth in steel averaged 2.0 percent per year among production workers.

Although productivity gains should help the domestic steel industry improve its competitive position in the international marketplace, it is unlikely that the United States' share of world steel production will grow sufficiently to spur a similar recovery in industry employment. Most observers agree that increases in U.S. steel output will not be accompanied by comparable expansion of the steel workforce. 3/ Instead, various studies indicate that the overall size of the steel workforce will continue its downward course due, in part, to technology-induced productivity gains.

Because the effect of technological change is not uniform across occupations, the job mix and skills required of the steel workforce will change at the same time that total employment is declining. The more pervasive use of current technologies, and the introduction of new technologies as they are developed, will promote expansion and contraction of different jobs at various times. 4/ The nature of jobs will be altered, as well, by the adoption of new technologies: the worker as monitor of a computer-directed production process, for example, is likely to become increasingly commonplace; the worker as direct participant on

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3/ National Research Council. The Competitive Status of the U.S. Steel Industry. Washington, National Academy Press, 1985. p. 134; Personick, Valerie. The Outlook Through 1995: Industry Output and Employment Projections. Monthly Labor Review, November 1983. p. 33; U.S. Congressional Budget Office. The Effects of Import Quotas on the Steel Industry. Washington, U.S. Govt. Print. Off., 1984. p. 44; U.S. Library of Congress. Congressional Research Service. The Outlook for Steel, 1983-1986: An Analysis Based on the Data Resources, Inc. Interindustry Model Projections. Report No. 83-590 E, by David J. Cantor. Washington, 1983. p. 7-8.

4/ For an analysis of the relationship between occupational employment and computer-based technologies across all manufacturing industries see U.S. Office of Technology Assessment. Computerized Manufacturing Automation: Employment, Education, and the Workplace. Washington, U.S. Govt. Print. Office., 1984. p. 101-148.

the factory floor, actively involved with the machine producing the output, is likely to become an increasingly rare sight.

In addition to examining the overall employment trends in the steel industry, the following analysis will focus on how the composition of the steel workforce has changed to date and is likely to change in the years to come. The effect of the industry's modernization on steelworkers -- both those laid-off and those still employed -- also will be addressed. Options to ease worker adjustment as the steel industry strives to recover will be presented, as well.

I. THE SHAPE OF CHANGE, 1977-1980

The 1977-1980 period provides a good base from which to assess the recent experience of the steel industry. In 1977, both output and employment were increasing as the economy recovered from the deep recession of the mid-1970s; in 1980, the two measures began decreasing as the economy entered a recessionary period. During these years, the industry had begun to restructure and modernize its operations. Two companies went bankrupt; some plants and operations were shut down; and integrated steel companies reduced capacity by about 14 million tons. 5/ A falling share of U.S. steel output was being produced in open hearth furnaces, while a rising share was being produced in basic oxygen and electric furnaces. Continuous casters were being more widely used in these years, as well. In both 1977 and 1980, the U.S. Bureau of Labor Statistics (BLS) conducted surveys of the blast furnaces and basic steel products industry (Standard Industrial Classification 331) which provide detailed information on its occupational structure.

5/ Hogan, William T. Steel in the United States: Restructuring to Compete. Lexington, Mass., Lexington Books, 1984. p. 9-94, 107, 125-126.

A. Employment by Occupation

As shown by the data in table 1, employment changes experienced by steelworkers between 1977 and 1980 varied across major occupational groups. Despite their job losses, blue-collar workers managed to maintain their four-fifths share of total industry employment. At the same time, the proportion of white-collar jobs edged up slightly because they experienced relatively smaller cutbacks (5.2 percent, or 5,000 jobs) compared to blue-collar workers (8.2 percent, or 36,800 jobs).

Some employees actually were added to the industry's payroll as others were being laid off. For example, the number of computer specialists grew by 400, or 22.2 percent, during the period. Growth was particularly rapid among systems analysts. The ranks of engineers also expanded by 400, or 4.7 percent. Industrial and electrical engineers made especially large relative job gains. (See appendix table for information on detailed occupational employment.)

On the other hand, blue-collar steelworkers in many of the less skilled occupations lost their jobs. Technological advances enabled machines to perform the tasks involved in some operatives' jobs. The encroachment of robots partly is reflected in the 4,300 job cutback among welders and flamecutters, which represented about one-fourth of their number in 1977, and in the 100-job cutback among production painters, which reduced their ranks by one-fifth in just 3 years. Similarly, the technological innovation permitting numerical rather than manual control of machine tools probably contributed to the loss of 1,600 jobs (or 9.9 percent) among machine tool operators. Jobs in the fairly low-skilled occupational group of laborers also fell substantially, down by 16,400 (or 17.0 percent) in 1980 compared to 1977.

Those helped or hurt by modernization cannot be strictly categorized along white-collar or blue-collar lines, however. One white-collar occupation within the engineering and science technicians' group -- drafters -- experienced cutbacks as its duties were increasingly taken over by computer-aided design technology. At the end of the period, there were 300 (or 17.6 percent) fewer drafters. The number of clerical jobs also declined, partly due to the growing pervasiveness of office automation. By 1980, there were 5,900 (or 12.1 percent) fewer clerical workers than in 1977.

Among blue-collar occupations, the data suggest that some of the more skilled workers may have benefitted from the steel industry's greater use of new technologies. One might expect the demand for mechanics, repairers, and installers to rise as new machines are put into use and require maintenance. Indeed, in 1980, there were 7,000 (or 17.7 percent) more mechanics, repairers, and installers in the steel workforce than in 1977.

B. Employment-to-Output Relationship

Another way to look at the evolving occupational structure of the steel industry explicitly takes into account the changing relationship between employment and output. Expressed in terms of workers per million tons of steel produced, the data in table 2 illustrate the industry's growing reliance upon more highly trained and skilled workers who perform non-routine tasks -- both in white-collar and blue-collar occupations — and its decreasing dependence upon workers whose job duties are susceptible to assumption by new technologies.

In 1980, there were 80 engineers employed per million tons of U.S. steel produced, up from 69 engineers in 1977. Some 67 engineering and science technicians were associated with each million tons of steel in 1980 compared to 57 technicians 4 years earlier. There were 417 mechanics, repairers, and installers employed per million tons of steel produced in 1980 as against 316 in 1977. In each of these occupations, the employment-to-output ratio increased at rates

Table 1. Employment by Occupation in the Steel Industry
Actual and Projected
(Employment in thousands)

	Actual a/		Projected b/
Occupation	1977	1980	1995
Total, all occupations	554.3	511.9	355.8 - 433.4
White-collar occupations	95.6	90.6	63.7 - 77.6
Professional, technical, and related occupations	28.2	27.7	19.2 - 23.4
Engineers	8.6	9.0	6.4 - 7.9
Engineering and science technicians	7.2	7.5	4.6 - 5.6
Computer specialists	1.8	2.2	1.7 - 2.1
All other	10.6	9.0	6.5 - 7.7
Managers, officials, and proprietors	15.9	16.1	12.0 - 14.6
Sales occupations	3.0	4.1	2.6 - 3.2
Clerical occupations	48.6	42.7	29.9 - 36.4
Blue-collar occupations	447.0	410.2	284.5 - 346.5
Craft and related occupations	191.3	193.7	136.3 - 166.0
Construction occupations	27.0	29.0	20.3 - 24.7
Mechanics, repairers, and installers	39.6	46.6	33.5 - 40.8
Metalworking crafts, excl. mechanics	30.0	31.9	22.4 - 27.3
All other	94.7	86.1	60.1 - 73.2
Operative occupations	159.3	136.6	93.9 - 114.4
Assemblers	1.2	1.0	0.7 - 0.9
Metalworking operatives	47.6	45.7	31.7 - 38.7
Packing and inspective operatives	5.2	3.0	2.1 - 2.6
Painters, production	0.5	0.4	0.2 - 0.3
Sawyers, metal	1.8	1.1	0.8 - 1.0
Transportation equipment operatives	17.3	17.9	12.5 - 15.2
All other	85.8	67.6	45.9 - 55.9
Laborers, excluding farm	96.4	80.0	54.3 - 66.1
Service occupations	11.7	11.1	7.7 - 9.4

a/ Derived by applying the occupational staffing patterns for SIC 331 from BLS' Occupational Employment Surveys in 1977 and 1980 to actual industry employment in the 2 years.

(continued)

Table 1. Employment by Occupation in the Steel Industry
Actual and Projected — Continued

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b/ Derived by applying BLS' staffing pattern for SIC 331 projected to 1995 to a) Data Resources, Inc.'s (DRI's) projected 1995 employment in blast furnaces and steel mills; electrometallurgical products; steel wire and related products; cold finishing, steel shapes; and steel pipe and tubes, and to b) BLS' projected 1995 employment in blast furnaces and basic steel products. The low-end of the range shown above is based upon employment growth rates from DRI's Interindustry Forecast, April 1985 (unpublished). The high-end of the range is based upon employment growth rates from BLS' low growth alternative, June 1984 (unpublished).

Source: Calculated by the U.S. Congressional Research Service based upon BLS and DRI data.

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more than four times the industry average (3.5 percent) over the 1977-1980 period.

In technology-susceptible occupations, the employment-to-output relationship declined. For example, semiskilled operative jobs dropped to 1,221 per million tons from 1,271 over the 1977-1980 period. Within the operative group, welders and flamecutters fell from 140 to 118 per million tons produced. Much less extensive use also was made of unskilled laborers, with each million tons of steel associated with 769 workers in 1977 compared to 715 by 1980.

II. THE SHAPE OF CHANGE, 1980-1995

As previously noted, analysts agree that U.S. steel employment will not return to its previous peak level. How far and how fast the drop in domestic steel employment is projected to be depends upon assumptions about the worldwide demand for steel products, the U.S. share of that demand, and the rate of productivity growth. Productivity growth, in turn, is related to the rate at which technological innovation is assumed to be introduced by steel producers, among other things. The future rate of technological change will depend upon the cost of the advanced technologies and the industry's ability to pay those costs.

Table 2. Employment-to-Output Relationship in the Steel Industry
Actual and Projected
(Workers Per Million Tons of Steel Produced)

Occupation	Actual a/		Projected b/
	1977	1980	1995
Total, all occupations	4,423	4,577	2,746 - 3,362
White-collar occupations	763	810	492 - 602
Professional, technical, and related occupations	224	248	148 - 182
Engineers	69	80	49 - 61
Engineering and science technicians	57	67	36 - 43
Computer specialists	14	20	13 - 16
All other	84	81	50 - 60
Managers, officials, and proprietors	127	144	93 - 113
Sales occupations	24	37	20 - 25
Clerical occupations	388	382	231 - 282
Blue-collar occupations	3,566	3,668	2,196 - 2,688
Craft and related occupations	1,526	1,732	1,052 - 1,288
Construction occupations	215	259	157 - 192
Mechanics, repairers, and installers	316	417	259 - 316
Metalworking crafts, excl. mechanics	239	285	173 - 212
All other	755	770	464 - 568
Operative occupations	1,271	1,221	725 - 887
Assemblers	10	9	5 - 7
Metalworking operatives	380	409	245 - 300
Packing and inspecting operatives	41	27	16 - 20
Painters, production	4	3	2 - 2
Sawyers, metal	14	10	6 - 8
Transporation equipment operatives	138	160	96 - 118
All other	685	604	354 - 434
Laborers, excluding farm	769	715	419 - 513
Service occupations	93	99	59 - 73

a/ Derived by dividing occupational employment data presented in table 1 by output data from the American Iron and Steel Institute.

b/ Derived by dividing occupational employment data presented in table 1 by projected output data developed from DRI and BLS models.

Source: Calculated by the U.S. Congressional Research Service.

A. The Future Size of the Steel Workforce

One estimate of the decline in steel employment, from 1980 to 1995, appears in tables 1 and 3. By 1995, total employment in the industry might fall to between 355,800 and 433,400 workers. Over the 15-year period, then, job losses could affect from 1.1 percent to 2.4 percent of steelworkers each year through some combination of layoffs and attrition.

Based upon the actual experience of the industry from 1980 to 1984, the data suggest that most of the job cutbacks might already have occurred. (See table 3.) The majority of obsolete facilities have been closed, and inefficient equipment has been or will likely be discarded or modernized by the late 1980s. 6/ Through the remainder of the period, then, steel employment might be fairly stable or rising moderately.

According to BLS data, steel employment dropped from about 511,900 in 1980 to 336,700 in 1984. While the economy has been recovering from the back-to-back recessions of 1980 and 1981-1982, steelworkers have continued to be displaced in significant numbers. Steel output, on the other hand, rebounded by nearly 15 percent between 1982 and 1983. If the 1980-1982 job losses reflected the industry's normal response to cyclically-reduced demand alone, one would expect the subsequent increase in output to have caused producers to recall some workers by 1984. 7/ Instead, they continued to let workers go, indicating that they have been adjusting to more long-run factors influencing the industry (e.g., import competition, excess capacity, product substitution) by permanently lessening labor requirements through shutdowns and automation.

6/ Hogan, Steel in the United States, p. 119 and 138.

7/ U.S. Congressional Budget Office. The Effects of Import Quotas on the Steel Industry. Washington, 1984. p. 19.

Table 3. Employment Change in the Steel Industry,
Actual and Projected

Employment (in thousands)

Actual a/			Projected b/
1977	1980	1984	1995
554.3	511.9	336.7	355.8 - 433.4

Employment Change (in thousands)

Actual a/		Projected b/	
1977-1980	1980-1984	1980-1995	1984-1995
(-42.4)	(-175.2)	(-78.5) - (-156.1)	(+19.1) - (+96.7)

Employment Change (compound annual average rate)

Actual a/		Projected b/	
1977-1980	1980-1984	1980-1995	1984-1995
(-2.6%)	(-9.9%)	(-1.1%) - (-2.4%)	(+0.3%) - (+1.6%)

a/ U.S. Bureau of Labor Statistics data.

b/ Projections from table 1.

Source: Calculated by the U.S. Congressional Research Service.

B. The Future Composition of the Steel Workforce

Both salaried and factory employees suffered severe cutbacks between 1980 and 1984. According to BLS data, there were about one-third fewer salaried (-38,000) and production (-137,000) workers in 1984 than in 1980. At Bethlehem

Steel alone, about 12,000 white-collar positions have been abolished since 1981. 8/

Some white-collar workers have been better able to weather the adjustment process to date, because demand for their skills has been increasing as the industry steps up modernization efforts. For example, the Granite City Steel plant of National Steel Corporation inaugurated a new phase of technological advancement in 1985 when it completed work on a hot strip mill computer. 9/ The company hired its own specialists capable of developing the computer system: five programmers worked for 2 years on setting up the computer-controlled production system. In addition, the company now has established an operations technology department composed of 20 people, including mechanical, electrical, chemical, and metallurgical engineers. They are charged with developing process improvements and quality controls, among other things.

The shift toward employment of relatively more skilled professional and technical workers may be slowing, however. After rising from 1.55 percent in 1977 to 1.75 percent in 1980, BLS estimates that engineers' share of industry jobs will grow at a more modest pace in the future, reaching 1.81 percent by 1995. Similarly, it is anticipated that computer specialists' proportion of total steel employment will grow more slowly than it has of late: in 1977, it measured 0.32 percent; by 1980, it stood at 0.43 percent; and by 1995 it may edge up to 0.49 percent.

With the recent acceleration of modernization efforts, much of the necessary technical expertise may already have been hired so that fairly stable or

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8/ Suddenly, the World Doesn't Care If You Live or Die. Business Week, February 4, 1985. p. 98.

9/ Congressional Record, Daily Edition, v. 135, April 24, 1985, p. S4716-4717.

slowly falling employment of professional and technical workers could well mark the remainder of the projection period. As shown in table 1, employment among these groups is projected to be lower in 1995 than in 1980 -- despite their growing share of the workforce. Thus, the substantial demand-induced shrinkage in the industry's overall size to date is likely to swamp its growing reliance upon more educated and skilled workers.

Similarly, the more highly skilled blue-collar occupations that recorded expanded employment between 1977 and 1980 could well see their ranks diminish by the end of the projection period. As computed from the data in table 1, craftworkers were added to the industry payroll in the 1977-1980 period (0.4 percent per year, on average) while the less skilled blue-collar groups of operatives and laborers reported cutbacks (-5.0 and -6.0 percent annually, on average). Between 1980 and 1995, however, all three groups are projected to experience falling employment comparable to the industry's average rate of job contraction. 10/

For the two less skilled blue-collar categories this would represent a positive turn of events. That is, in 1977-1980, their rate of decline was about two or more times higher than the industry's annual average rate of -2.6 percent. For the skilled craftworkers, it might signal a lessening of their more favorable position compared to other blue-collar workers. For example, the mechanics, repairers, and installers group, which expanded by 5.6 percent annually between 1977 and 1980, is projected to contract by between 0.9 percent and 2.2 percent per year on average. Thus, the need to install and maintain automated equipment

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10/ As shown in table 3, the industry's annual average rate of employment change is estimated to range from -1.1 percent at the high-end of the projected job range (BLS) to -2.4 percent at the low-end of the range (DRI). For craftworkers, the range is projected to be from -1.0 percent to -2.3 percent; for operatives, from -1.2 percent to -2.5 percent; and for laborers, from -1.3 percent to -2.6 percent. See appendix table for absolute employment levels.

appears unlikely to forestall some cutbacks among these skilled workers. Although BLS anticipates that their share of total industry employment will continue to rise, from 7.14 percent in 1977 to 9.11 percent in 1980 to 9.42 percent in 1995, their total employment level will likely fall by the end of the projection period. Just as in the case of some professional and technical workers, the industry's growing reliance upon skilled blue-collar workers is apt to be overwhelmed by the substantially reduced demand for steel at the present time.

In summary, the data suggest that no occupation is likely to be immune to the adjustment process affecting the domestic steel industry. Differences in employment change by occupation between 1980 and 1995 will be more a matter of degree than direction. That is, some occupations requiring higher levels of education and skill could well have rates of employment decline somewhat below the industry's average rate, while other occupations whose duties are susceptible to encroachment by new technologies could well have rates of employment decline above the industry's average. The most positive conclusion to be drawn is that the massive layoffs which recently have plagued steel's workforce are likely near their end. Between the late 1980s and 1995, the continued restructuring and modernization of the steel industry probably will have a minimal effect on employment compared to the job losses already incurred.

III. THE PLIGHT OF STEELWORKERS

Both those workers who have been laid off from the steel industry with little likelihood of being recalled and those still employed at steel firms are being affected by the industry's dramatic shake up. For the two groups, it has meant a great blow to their job security. More specifically, for the laid-off workers, it has involved starting anew at a time in their working lives when change often is unwelcome and people are not best-equipped to handle it; for the presently-employed steelworkers, it has involved the prospect of learning to adapt to new equipment and practices. Neither the steelworkers nor their industry wanted this upheaval, but they -- along with their communities -- are trying to deal with it.

A. Dislocated Steelworkers

Other than what might be learned from anecdotal reports, definitive information on the characteristics and subsequent employment experience of dislocated steelworkers is sparse. The most comprehensive data is available from BLS' survey of workers who were laid off between January 1979 and January 1984 due to plant closings or relocations, slack work, or abolishment of positions or shifts. So that the survey could focus on unemployed workers who had had a firm attachment to their former jobs, BLS further narrowed its definition of dislocated workers to persons who were 20 years or older with at least 3 years job tenure. 11/

1. Their Reemployment Experience

The survey data indicate that some 120,000 steelworkers who lost their jobs between January 1979 and January 1984 fit BLS' dislocated worker definition. 12/

11/ The following analysis is based upon U.S. Department of Labor. Causes and Remedies for Displacement of Steel Workers. April 1985; U.S. Bureau of Labor Statistics. Press Release 84-492, November 30, 1984. (An example of a case study on the effect of mass layoffs at a particular steelmaker can be found in Steelworkers Research Project. Chicago Steelworkers: the Cost of Unemployment. Chicago, Health and Medicine Policy Research Group, 1985. 65 p.)

12/ In this tabulation, the steel industry includes blast furnaces, steelworks, and rolling and finishing mills.

Nearly two out of every three dislocated steelworkers were found to live in the Middle Atlantic and East North Central regions. Another one out of five lived in the West and East South Central regions. 13/ They most often were white married men, in their prime working years, with families. Typically, they had a high school education, and possessed skills as operatives. After averaging over 10 years at the job that they lost, they received unemployment insurance benefits for some part of their average 20-30 weeks of joblessness.

By January 1984, half of the dislocated steelworkers had found other jobs. Close to one-third remained unemployed, and nearly one-fifth had left the labor force. Among those aged 55-64, more than 1 out of 3 no longer were in the labor force. Although the data do not indicate why the workers withdrew from the labor force, it is likely that many of the older dislocated steelworkers opted for retirement rather than unemployment.

The subsequent employment experience of all dislocated workers and of those formerly working in other durable goods manufacturing industries was more favorable than that of dislocated steelworkers: their unemployment rate (about one-fourth were still jobless) and rate of labor force withdrawal (at 14 percent) were lower than those of dislocated steelworkers. Moreover, other dislocated workers experienced shorter average periods of joblessness. Consequently, they were less prone to exhaust their unemployment benefits than were dislocated steelworkers.

The reemployment of problems of dislocated steelworkers have been compounded by their geographic concentration, which has intensified competition for jobs

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13/ The Middle Atlantic region covers New Jersey, New York, and Pennsylvania. The East North Central region covers Illinois, Indiana, Michigan, Ohio, and Wisconsin. The West South Central region covers Arkansas, Louisiana, Oklahoma, and Texas. The East South Central region covers Alabama, Kentucky, Mississippi, and Tennessee.

available within a reasonable commuting radius. In addition, with the steel industry as the mainstay for some areas' economies, its downsizing has meant that there often are few alternative jobs in the localities for which the dislocated steelworkers can compete. Along with other dislocated workers, unemployed steelworkers share other barriers to reemployment, such as their inexperience in how to look for another job due to their long-time attachment to one firm, their general reluctance to relocate, and, in some instances, their age. 14/

Dislocated steelworkers fortunate enough to find new full-time jobs by January 1984 were less likely to be earning as much as they had previously compared to all dislocated workers and to those displaced from other durable goods manufacturing industries. 15/ Over half of dislocated steelworkers in full-time jobs were earning one-fifth or less of their former wages. In contrast, about one-quarter of all dislocated workers and one-third of dislocated workers from durable goods manufacturing industries reemployed in full-time jobs were bringing home paychecks equalling one-fifth or less of their previous earnings.

Thus, not only have dislocated steelworkers had a harder time finding new jobs, but they also have had a more difficult time getting jobs that pay close to their former earnings levels. Part of the reason lies with their above average wages which means few jobs in other industries offer similar earnings. For example, steelworkers averaged $13.00 an hour in 1984 compared to $9.72 an hour

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14/ For additional information on the reemployment handicaps of dislocated workers and on the subject of worker displacement in general see U.S. Congressional Budget Office. Dislocated Workers: Issues and Federal Options. Washington, U.S. Govt. Print. Off., 1982. 56 p.; U.S. Library of Congress. Congressional Research Service. Economic Growth and Changing Labor Markets: Those Left Behind: Dislocated Workers; An Analysis. Report No. 83-220 E, by Linda LeGrande. Washington, 1983. 33 p.

15/ In this tabulation, the steel industry includes blast furnaces, steelworks, rolling and finishing mills, and iron and steel foundries.

for factory workers in all durable goods manufacturing industries. Another contributing factor is that a portion of the unemployed steelworkers' former earnings reflects their industry-specific skills. Since the skills are not transferable to jobs in other industries, new employers will not compensate the former steelworkers for those skills. Similarly, to the extent that dislocated steelworkers' earnings were related to seniority rather than to their general skill level, it will make it more difficult for them to find new jobs offering comparable pay in other firms or industries because they will have to start at the bottom of the seniority ladder.

2. Worker Adjustment Assistance

> Ultimately, the vast majority will find new positions or retire. But, in many cases, disillusionment will accompany the new paycheck -- the result of abandoning former career goals, preferred hometowns, and the serene reliance on job security. These people are finding that things aren't necessarily getting better year after year . . . . For members of the U.S. middle class, that is tantamount to the death of the American Dream. 16/

As joblessness sharply increased in the early 1980s, there was just one Government program in operation that focused on dislocated workers -- the Trade Adjustment Assistance (TAA) program. It is directed at one subset of the dislocated worker population, namely those whose unemployment is related to import competition. Unless extended by Congress, the TAA program will expire at the end of this fiscal year.

Between April 1975 and the first half of 1984, the U.S. Department of Labor (DOL) received and processed over 1,200 petitions for assistance that involved workers from the steel industry -- with nearly 6 out of 10 submitted between

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16/ Suddenly the World Doesn't Care If You Live or Die, p. 98.

January 1979 and June 1984. 17/ Of these, about 350 petitions covering some 166,000 steelworkers were certified as eligible for assistance under the program in the past 9 years.

The TAA program offers income support (i.e., trade readjustment allowances) and adjustment services (e.g., job search help, training, relocation aid). Through June 30, 1984, the DOL paid over $383 million in trade readjustment allowances to more than 157,000 former steelworkers. 18/ As has been the case during the life of the TAA program, the level of income support payments dwarfed the amount of funds expended for job search assistance ($342,000 for 976 steelworkers) and relocation allowances ($1.3 million for 768 steelworkers).

DOL's Employment and Training Administration conducted a special survey of some 8,700 TAA participants from the steel industry who have entered training since October 1981. 19/ Most steelworkers who enrolled in training courses were in their prime working years (i.e., 25-44 years of age). About one-fourth of those who completed training obtained jobs related to their fields of training. Most often, the steelworkers were trained to be refrigeration/air conditioning repairers, welders, computer technicians, truck drivers, and mechanics (e.g., industrial maintenance and autos). Of those who did not complete their training, more than one-third returned to their former jobs and over one-fifth left due to financial problems.

Today, the major Government program serving dislocated workers is Title III of the Job Training Partnership Act (JTPA). Eligible persons can receive job

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17/ Causes and Remedies for Displacement of Steel Workers, p. 60-61. The steel industry includes carbon and alloy steel products.

18/ Ibid., p. 61

19/ Ibid.

search assistance, retraining, and relocation allowances. In contrast with the TAA program, funds available for income support are very limited.

JTPA programs directed at dislocated steelworkers have been supported by the Secretary of Labor's Title III reserved funds and the States' Title III allocations. 20/ Examples of projects funded from the national reserve account are $1 million to Chicago's Office of Employment and Training for helping dislocated steelworkers in the Chicago area; $1 million to Allegheny County's Department of Federal Programs for assisting U.S. Steel Corporation workers in Allegheny and Beaver Counties, Pennsylvania; $1.4 million to Utah's Office of Job Training for Economic Development for aiding dislocated workers from Kennecott Copper Company and U.S. Steel Corporation's Geneva Works; and $1.2 million to Pennsylvania's Private Sector Initiatives Job Search Program for serving workers laid off from Crucible Steel who reside in Pennsylvania, Ohio, and West Virginia. State-supported programs that cover dislocated steelworkers include $180,000 in the Pueblo area of Colorado to serve dislocated workers from the CF&I steel plant; $1.0 million in Lake and Porter Counties, Indiana, administered by the AFL-CIO to assist workers in steel and related industries; and $143,000 in the Ashland area of Kentucky to help steelworkers from Amcast Steel, Armco Steel, Kentucky Steel, and AFT.

Title VIII of the Trade and Tariff Act of 1984 is directed specifically at the relationship between international trade, steel industry modernization, and worker displacement. It states that, in return for the President's negotiation and continued enforcement of restraint agreements with steel-exporting nations, the major U.S. steel producers must commit substantially all of their net cash flow from steel operations to reinvestment in and modernization of the steel

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20/ Ibid., appendix.

industry, and at least 1 percent of that amount must be devoted to worker retraining.

Under the Act, Congress directed the DOL to submit a plan proposing ways to assist workers in communities that are adversely affected by steel imports, including retraining and relocation of steelworkers unlikely to be recalled to their jobs. As part of the plan submitted in spring 1985, the DOL has established a steel adjustment project devoted to assisting dislocated steelworkers. 21/ The 3-part project involves: (1) a set-aside of $10 million from JTPA's Title III reserved funds, for training and employment services, conditional on States and localities providing a two-for-one match; (2) a Federal technical assistance team working with appropriate parties at all levels of government to assure timely development of projects that make full use of current knowledge to reemploy dislocated steelworkers; and (3) a task force, chaired by the Under Secretary of Labor and composed of representatives from labor, industry, and State and local governments, to assess current worker adjustment efforts and formulate ways to improve them.

To date, the DOL has announced that, subject to the matching requirement and approval of specific project proposals, 19 States are expected to receive the $10 million JTPA set-aside. 22/ The states are Alabama, California, Colorado, Illinois, Indiana, Kentucky, Maryland, Michigan, Minnesota, New Jersey, New York, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Utah, Washington, and West Virginia. It is anticipated that the programs should be in operation by midsummer 1985.

21/ Ibid., p. 81-82.

22/ Labor Department Grants $15 Million to Dislocated Workers in Steel, Copper. Daily Labor Report, June 3, 1985. p. A-16.

B. The Employed Steelworker

Although not in as precarious a position as the dislocated steelworker, those remaining in the steel workforce have lost some of the employment stability they once enjoyed. Their jobs may not have been eliminated by modernization, but rather, may now be changed by it. That is, their job classifications, the nature of the work assigned to them, and the skills required to perform their job duties are not as immutable as in the past.

1. Skill Upgrading

When people envision the modernized steel mill, they see a workplace involving production processes that put fewer physical demands on workers. 23/ Instead of being on a noisy plant floor, in direct physical contact with hot, hazardous materials, steel mill workers are seen as monitors or troubleshooters of electronically controlled manufacturing operations. The workers are pictured in control rooms, removed from the factory floor, but still responsible for what is occurring there by reading production-related information which appears on meters or visual display terminals. 24/

The skills required to monitor electronic controls and computers are different from those needed to tend steel furnaces. The former include technical capabilities, attentiveness, and verbal communication. 25/ The latter include

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23/ U.S. Congress. House. Committee on Science and Technology. Subcommittee on Science Research and Technology; and Committee on the Budget. Task Force On Education and Employment. Technology and Employment. Hearings, 98th Cong., 1st sess. June 1983. Washington, U.S. Govt. Print. Off., 1983. p. 293.

24/ Ibid., p. 271.

25/ Ibid., p. 271-272.

such physical capabilities as strength, hand-eye coordination, and agility. The problem for currently employed steelworkers, then, is that these new skills do not appear to mesh well with those possessed by and formerly useful to them in performing their jobs.

One might argue that those who have invested many years with the same employer should be given a chance to try to make the transition from a more manual to a more automated industry. If the industry is being given some breathing room during which to modernize (i.e., the period of the export restraint agreements), as a matter of equity, should not the steelworkers be given time to adapt to their evolving conditions? Against this equity consideration, however, must be balanced a cost consideration: it would very likely be less expensive for steelmakers to displace current employees and then hire new workers already possessing the requisite skills who would start at the bottom of the seniority ladder. 26/

It appears that the Trade and Tariff Act of 1984 tries to strike a balance between the industry's needs and those of its workers. While giving steel producers a green light to modernize, Congress imposed an obligation on steel companies to be financially responsible for the outcome of their actions, i.e., to pay for retraining of workers permanently displaced by new technologies so that they are better prepared to find other employment. Taking this line of reasoning back one step, it might be argued that the industry's responsibility for modernization's effects begins before the worker is let go. 27/ Thus, the first step

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26/ In a survey of 322 senior human resource executives at Fortune 500 companies, it was found that the most often used strategy for dealing with skill obsolescence was hiring new employees with the requisite skills and the least preferred strategy was retraining employees for new positions. However, a positive association between the degree of technological change and use of retraining was suggested by the data. ITT Educational Service. America at Work: The Management Perspective on Training for Business. Washington, 1984. p. 9-11.

27/ Data from a survey of 1,821 companies' training activities (continued) in the worker adjustment process would involve efforts to upgrade the skills of current employees to enable them to remain on the payroll, and then only if that failed, would the second (permanent separation) and third (retraining for non-steel jobs) steps occur.

Whether workers' skills can be upgraded sufficiently to enable them to work with the new technologies is going to depend upon the characteristics of the individual employee and the extent to which skill requirements change. It may be highly improbable to transform a 50-year-old furnace operator who never completed high school into a programmer of computerized manufacturing equipment, for example. It is much more probable, however, that an industrial machinery or maintenance repairer can learn the necessary technical skills to advance from working on mechanical to working on electronic equipment. 28/

To the extent that skill upgrading is possible, it has benefits for steel producers, steelworkers, and society in general. Steelmakers would save on severance payments and supplemental unemployment benefits, for example. Steelworkers neither would have to undergo the trauma associated with joblessness nor lose seniority-related earnings and benefits. For society as a whole, there would be less of a drain on the unemployment insurance system as well as less of a strain on social services, among other things.

(continued) suggest that a minority (35.8 percent) of manufacturing firms retrain those workers whose jobs are phased out to perform substantially different jobs. Of all firms that do provide retraining, production workers are most likely to receive retraining. Retraining: Media Event or Workplace Reality? Training, October 1984. p. 46.

28/ Technology and Employment, p. 1234.

2. Other Options for Employment Security

Skill upgrading is just one possible method that permits change to occur in the workplace while minimizing the threat to the continued employment of the current workforce. Other measures sometimes mentioned toward the same end include job redesign and worksharing.

Because of the introduction of new technologies, the present configuration of job duties and relationships among job classifications may no longer be the most efficient. Greater employer flexibility in the assignment of job duties, for example, might facilitate worker productivity. Moreover, by broadening the scope of work that individuals could be asked to perform, their versatility and general skill level might be raised. This, in turn, could increase the importance of their role in the production process and thereby enhance their employment security. 29/ How best to accomplish job redesign so that management and labor benefit is going to be an important subject for collective bargaining.

Worksharing also offers the potential for maintaining employment in the face of reduced demand for labor. As in the case of job redesign, however, it is likely to be a difficult concept to implement. For example, Jones and Laughlin Steel Corporation and Steelworkers Local 1211 agreed to share jobs available to the labor pool among members of a rotating layoff group. 30/ Initially, the plant's labor pool was composed of two groups, one covering 220 employed workers and the other covering 205 laid-off workers. By merging the two groups, the available jobs were to be spread across 425 rather than 220 workers each of whom would rotate layoff periods of not more than 3 months. The arrangement was

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29/ Computerized Manufacturing Automation, p. 111-112 and 154.

30/ Work Sharing Continues at Steel Plant. Employment and Training Reporter, March 20, 1985. p. 850.

challenged in the U.S. District Court of Western Pennsylvania by both groups of workers. The employed members of the labor pool asserted that the union had violated its duty of fair representation and that the contract had been violated because the laid-off workers added to the labor pool possessed less seniority. The Court decided, however, that the union acted in the best interests of all its members by providing them with work when many were jobless and not receiving unemployment benefits. Resumption of work by the laid-off workers would enable them to regain eligibility for unemployment compensation, health insurance, and supplemental unemployment benefits, according to the Court, as well as to resume accumulating pension credits. Although the previously employed members of the labor pool would work fewer days as a consequence of the merger, the Court held that their lower earnings would be mitigated by their receipt of State and employer-provided unemployment benefits. Members of the laid-off group, who would have been able to retire early if their layoff period reached 2 years, challenged the agreement as well. The Court decided that the worksharing agreement is valid, despite its meaning that these workers would not be able to opt for early retirement.

While this form of worksharing requires labor-management negotiation, another version of the concept requires modification of State unemployment insurance laws. Often referred to as short-time compensation, its intent is to create a more equitable distribution of unemployment during temporary lulls in economic activity. It seeks to accomplish this by: (1) shortening the workweek of all workers in the affected unit, rather than allowing some to continue working full-time while temporarily laying off others, and then (2) permitting these workers to qualify for partial unemployment benefits that compensate them for their reduced worktime. A limited number of States (including Arizona, California, Florida, Illinois, Maryland, Oregon, and Washington) permit this variant of worksharing.

Under the Tax Equity and Fiscal Responsibility Act of 1982, Congress directed the DOL to develop model language for short-time compensation programs which could be useful to State legislatures. 31/ In addition, the DOL is required to evaluate the impact of State programs and submit a report, with recommendations, to Congress by October 1, 1985.

IV. AFTERWORD

Steelworkers are one of the victims in the decline of the U.S. steel industry's international competitiveness. As imports have assumed a growing share of the world steel market, U.S. producers have laid off large numbers of workers. Steelmakers' efforts to reverse this trend and recoup some of their market share, however, will not result in a similar turnaround for its workforce -- because the restructuring and modernization that the industry's recovery entails means permanently fewer jobs.

For steelworkers, this has been an especially difficult reality to accept. They previously enjoyed years of job security, high pay, and good benefits. Once employed by a steelmaker, they knew what to expect and what was expected of them. Even when laid off during recessions, they would wait them out. They expected to be and were recalled once the economy and the steel industry went into a recovery cycle.

This time, the scenario is different. The economy has recouped its losses from the recessions of the 1980s; the steel industry has not. Workers in many industries have received word to return to their former jobs, but large numbers of steelworkers remain unemployed. And they are likely to remain unemployed if

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31/ Commerce Clearing House, Inc. Unemployment Insurance Reports, News Matters, August 23, 1983. p. 3936-3944.

they cling to the hope of recall by steel producers. The closing of entire plants, shutting down of some operations, and investment in new technologies means a downsizing of the industry — and to an even greater extent, of its workforce.

The altered situation faced by the steel workforce goes beyond a general contraction of its ranks to a change in its composition. That is, some workers have been hurt more than others because the cutbacks have hit occupations to differing degrees. Although all occupational groups have been adversely affected by job losses, those whose job duties are susceptible to assumption by new technologies have suffered relatively larger losses. The growing reliance of the industry on more educated and skilled workers has somewhat insulated them from the general contraction in steel.

The changing composition of the workforce has ongoing implications for dislocated and currently employed steelworkers. For dislocated steelworkers, it further lessens the likelihood of their resuming employment in the industry. That is, not only will the reduced demand for steel products keep them from being recalled, but also the different skills required by the modernized manufacturing process may prevent them from adapting their customary abilities to the new demands. Similarly, for currently employed steelworkers, their ability to remain in the workforce will depend, in part, upon how well the skills they possess and those now required mesh.

If the employment projections are fairly accurate, at least as rough indicators of general directions and magnitudes, then the number of steel jobs may already have bottomed out. Between the late 1980s and 1995, employment is likely to be somewhat stable or slowly expanding. As just noted, however, job growth will not be sufficiently large or in the occupations needed to reemploy all former steelworkers.

With or without public and private efforts to assist them, the future for steelworkers is going to be difficult. For some, it may mean early retirement. For many more, it is likely to mean getting a new, lower-paying job either on their own or with the assistance of employer- or Government-supported programs. A change in job, then, will likely entail a change in their standard of living. (Those dislocated steelworkers with greater general education and skills should have a somewhat easier time finding other employment and at a wage rate closer to that of their former jobs.) Retraining may help the dislocated steelworker increase the probability of reemployment, but not necessarily at a comparable wage or in the same geographic area. A new job, then, may entail adjusting to a new community, removed from their support network of friends and family. Analogously, skill upgrading for currently employed steelworkers may provide them with the opportunity to adapt to new job requirements, but it does not guarantee employment security. Such stability, which may be promoted by job redesign or work-sharing, is not apt to be the prevalent characteristic of the steel workforce that it was in earlier years.

APPENDIX

Table A. Employment by Detailed Occupation in the Steel Industry
Actual and Projected
(Employment in thousands)

	Actual a/		Projected b/
	1977	1980	1995
Total, all occupations	554.3	511.9	355.8 - 433.4
Professional, technical, and related occupations	28.2	27.7	19.2 - 23.4
Engineers	8.6	9.0	6.4 - 7.8
Civil	0.6	0.6	0.4 - 0.5
Electrical	0.8	1.1	0.7 - 0.9
Industrial	2.1	2.4	1.8 - 2.2
Mechanical	1.7	1.7	1.2 - 1.5
Metallurgical	2.0	1.9	1.4 - 1.7
Engineering and science technicians	7.2	7.5	4.6 - 5.6
Drafters	1.7	1.4	0.7 - 0.8
Electrical and electronic technicians	0.8	1.1	0.8 - 1.0
Industrial engineering technicians	1.3	0.9	0.6 - 0.8
Mechanical engineering technicians	0.2	0.2	0.1 - 0.2
Computer specialists	1.8	2.2	1.7 - 2.1
Computer programmers	0.8	0.9	0.6 - 0.8
Computer systems analysts	1.0	1.2	1.1 - 1.3
All other	10.6	9.0	6.5 - 7.7
Managers, officials, and proprietors	15.9	16.1	12.0 - 4.6
Sales occupations	3.0	4.1	2.6 - 3.2
Clerical occupations	48.6	42.7	29.9 - 36.4
Bookkeepers and accounting clerks	3.6	3.3	2.3 - 2.8
Clerical supervisors	1.8	1.9	1.4 - 1.6
File clerks	0.4	0.5	0.3 - 0.4
General clerks, office	3.9	3.9	2.7 - 3.3
Office machine operators	3.8	3.3	2.3 - 2.8
Computer operating personnel	2.8	2.6	1.8 - 2.2
Computer operators	0.9	0.8	0.6 - 0.7
Data entry/keypunch operators	1.6	1.6	1.1 - 1.3
Peripheral EDP equipment operators	0.3	0.2	0.1 - 0.2
Order clerks	0.9	1.1	0.8 - 1.0
Payroll and timekeeping clerks	1.8	1.8	1.2 - 1.5
Personnel clerks	0.7	0.8	0.5 - 0.7
Procurement clerks	0.4	0.5	0.4 - 0.4

(continued)

Table A. Employment by Detailed Occupation in the Steel Industry
Actual and Projected -- Continued
(Employment in thousands)

	Actual a/		Projected b/
	1977	1980	1995
Production clerks	6.4	5.4	3.8 - 4.6
Receptionists	0.2	0.2	0.1 - 0.1
Secretaries, stenographers, & typists	6.5	6.1	4.6 - 5.6
Secretaries	3.0	3.1	2.5 - 3.0
Stenographers	1.3	1.1	0.8 - 1.0
Typists	2.2	1.9	1.3 - 1.6
Shipping and receiving clerks	2.0	2.0	1.4 - 1.7
Shipping packers	1.9	1.5	1.1 - 1.3
Statistical clerks	1.0	0.9	0.5 - 0.6
Stock clerks, stockroom and warehouse	3.9	3.0	2.1 - 2.5
Switchboard operators/receptionists	0.4	0.4	0.3 - 0.3
Telephone operators	0.2	0.2	0.1 - 0.2
Weighers	1.3	0.8	0.6 - 0.7
Craft and related occupations	191.3	193.7	136.3 - 166.0
Construction occupations	27.0	29.0	20.3 - 24.7
Bricklayers and stonemasons	4.8	5.7	4.0 - 4.9
Carpenters	2.1	1.9	1.4 - 1.6
Electricians	12.8	13.7	9.5 - 1.6
Painters, construction & maintenance	1.1	0.9	0.6 - 0.7
Plumbers and pipefitters	4.8	5.6	3.9 - 4.8
Structural steelworkers	1.2	1.1	0.8 - 1.0
Mechanics, repairers, & installers	39.6	46.6	33.5 - 40.8
Air conditioning, heating, and refrigeration mechanics	0.4	0.4	0.3 - 0.3
Automotive mechanics	3.5	2.6	1.8 - 2.2
Computer service technicians	0.1	0.1	0.1 - 0.9
Industrial machinery repairers	15.0	17.6	12.6 - 15.4
Instrument repairers	1.9	2.1	1.5 - 1.9
Maintenance repairers, general utility	2.9	5.3	3.7 - 4.5
Millwrights	13.9	15.7	11.6 - 14.1
Radio and television repairers	0.4	0.4	0.2 - 0.3
Metalworking crafts, excluding mechanics	30.0	31.9	22.4 - 27.3
Blacksmiths	0.4	0.4	0.2 - 0.3
Boilmakers	2.3	2.3	1.4 - 1.7
Forging press operators	0.3	0.6	0.4 - 0.5
Heat treaters, annealers, & temperers	3.2	2.8	2.2 - 2.6
Machinists and layoff markers	7.9	8.8	6.2 - 7.5
Layout markers, metal	0.6	0.6	0.4 - 0.5
Machinists	7.4	8.2	5.8 - 7.0

(continued)

Table A. Employment by Detailed Occupation in the Steel Industry
Actual and Projected -- Continued
(Employment in thousands)

	Actual a/		Projected b/
	1977	1980	1995
Job and die setters	1.2	1.6	1.1 - 1.4
Machine tool setters, metal	0.3	0.4	0.2 - 0.3
Punch press setters, metal	0.1	0.3	0.2 - 0.3
Shear and slitter setters	0.8	0.7	0.5 - 0.6
Molders, metal	0.4	0.4	0.3 - 0.3
Rolling mill operators and helpers	7.7	8.8	6.2 - 7.5
Sheet metal workers and tinsmiths	0.7	0.6	0.4 - 0.5
Toolmakers and diemakers	1.1	0.9	0.6 - 0.8
All other	945.7	86.1	60.1 - 73.2
Blue-collar worker supervisors	37.2	37.3	27.5 - 33.5
Cabinetmakers	0.2	0.2	0.1 - 0.1
Crane, derrick, and hoist operators	23.8	26.2	18.3 - 22.3
Inspectors	9.4	8.1	5.6 - 6.8
Locomotive engineers	2.3	2.4	1.6 - 2.0
Stationary engineers	1.8	2.4	1.2 - 1.5
Testers	2.1	2.7	1.9 - 2.3
Operative occupations	159.3	136.6	93.9 - 114.4
Assemblers	1.2	1.0	0.7 - 0.9
Metalworking operatives	47.6	45.7	31.7 - 38.7
Dip platers, nonelectrolytic	0.6	1.1	0.8 - 1.0
Electroplaters	0.7	0.7	0.5 - 0.6
Furnace operators, cupola tenders	3.7	2.8	2.0 - 2.4
Heaters, metal	1.9	2.5	1.7 - 2.1
Machine tool operators	16.2	14.6	10.0 - 12.2
Drill press & boring machine operators	0.7	0.6	0.4 - 0.5
Grinding & abrading machine operators, metal	2.9	3.6	2.4 - 2.9
Lathe machine operators, metal	2.8	1.9	1.3 - 1.6
Machine tool operators, combination	1.5	0.8	0.6 - 0.7
Machine tool operators, tool room	0.3	0.7	0.5 - 0.6
Machine tool operators, numerical control	0.4	0.3	0.2 - 0.2
Milling & planing machine operators	0.7	0.6	0.4 - 0.5
Power brake/bending machine operators, metal	0.9	1.0	0.7 - 0.9
Punch press operators	1.2	0.8	0.6 - 0.7
Shear and slitter operators, manual	4.9	4.2	3.0 - 3.6
Pourers, metal	2.4	3.0	2.0 - 2.5
Welders and flamecutters	17.5	13.2	9.2 - 11.2
Packing and inspecting operatives	5.2	3.0	2.1 - 2.6
Production packagers	5.2	3.0	2.1 - 2.6

(continued)

Table A. Employment by Detailed Occupation in the Steel Industry
Actual and Projected -- Continued
(Employment in thousands)

	Actual a/		Projected b/
	1977	1980	1995
Painters, production	0.5	0.4	0.2 - 0.3
Sawyers, metal	1.8	1.1	0.8 - 1.0
Transportation equipment operatives	17.3	17.9	12.5 - 15.2
Chauffeurs	0.3	0.3	0.2 - 0.2
Industrial truck operators	9.8	10.2	7.2 - 8.7
Railroad brake operators	2.2	2.5	1.7 - 2.1
Truckdriving occupations	5.0	5.0	3.5 - 4.2
All other	84.5	66.5	45.9 - 55.9
Filers, grinders, buffers, & chippers	2.0	2.5	1.7 - 2.1
Furnace operators & tenders, except metal	0.8	0.8	0.5 - 0.7
Miscellaneous machine operators, primary metals	14.2	11.5	8.0 - 9.8
Miscellaneous machine operators, not elsewhere classified, durable goods	6.0	6.3	4.4 - 5.4
Mixing operators	1.1	0.8	0.5 - 0.7
Oilers	2.3	2.0	1.5 - 1.8
Sandblasters and shotblasters	0.5	0.6	0.4 - 0.5
Laborers, except farm	96.4	80.0	54.3 - 66.1
Conveyor operators and tenders	1.5	1.4	1.0 - 1.2
Furnace operators and heat helpers	3.2	2.8	2.0 - 2.4
Gardners and groundskeepers, except farm	0.2	0.2	0.2 - 0.2
Helpers, trades	9.3	8.9	6.2 - 7.6
Riggers	4.9	4.4	3.1 - 3.7
Shakeout workers, foundry	0.2	0.2	0.1 - 0.1
Order fillers	1.6	1.7	1.7 - 2.1
All other	75.4	60.4	40.0 - 48.8
Service workers	11.7	11.1	7.7 - 9.4
Building custodians	5.9	5.5	3.8 - 4.7
Food service workers	0.6	0.3	0.2 - 0.2
Selected health service workers	0.3	0.2	0.1 - 0.2
Protective service workers	4.0	4.4	3.1 - 3.7
Supervisors, nonworking, service	0.7	0.6	0.4 - 0.5

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a/ Derived by applying the occupational staffing pattern for SIC 331 from BLS' Occupational Employment Surveys in 1977 and 1980 to actual industry employment in the 2 years.

(continued)

Table A. Employment by Detailed Occupation in the Steel Industry
Actual and Projected -- Continued
(Employment in thousands)

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b/ Derived by applying BLS' staffing pattern for SIC 331 projected to 1995 to a) Data Resources, Inc.'s (DRI) projected 1995 employment in blast furnaces and steel mills; electrometallurgical products; steel wire and related products; cold finishing, steel shapes; and steel pipe and tubes, and to b) BLS' projected 1995 employment in blast furnaces and basic steel products. The low-end of the range shown above is based upon employment growth rates from DRI's Interindustry Forecast, April 1985 (unpublished). The high-end of the range is based upon employment growth rates from BLS' low growth alternative, June 1984 (unpublished).

Source: Calculated by the U.S. Congressional Research Service.

Senator **Quayle**. The final witness is Mr. Ben Fischer, who is the adjunct professor of labor relations and public policy at the School of Urban and Public Affairs of the Carnegie-Mellon University in Pittsburgh. He was also assistant to the president of United Steelworkers of America until 1978.

Welcome, Mr. Fischer. Proceed.

Mr. **Fischer**. Thank you, Senator Quayle, Senator Simon. I appreciate this opportunity to meet with you.

The American steel industry's employment has been shrinking for 25 years almost steadily. There have been only one or two very slight interrupting blips and that continues, as Jack has indicated, at an accelerated rate—and will continue.

I have looked at some of the testimony at your earlier hearings and I think the notion that employment has bottomed out in the American steel industry is nonsense even though it comes from very distinguished quarters. In fact, the notion that employment in the manufacturing sector has bottomed out is equally invalid.

The continuing pressures of renewed global and domestic competitive pressures are going to continue the necessity and the actual implementation of a whole series of strategies on the part of companies around the country in the manufacturing sector and others to reduce employment, to create new efficiencies, and to overcome some of the relaxed policies of the pre-1980 period when we could afford relaxed policies towards the utilization of people.

So this has been a very steady thing and even assuming for the moment that somehow we could bring under control the penetration of foreign steel, that trend of reducing employment would still be in place, both because of strategies of rationalization of the work force which are taking place throughout the steel industry from the top down in management circles and in the hourly labor force—and I don't know of any steel company that is not deeply involved in that kind of strategy; I don't think Wheeling-Pittsburgh was but it will be now, and perhaps that explains some things—and because the introduction and further spread and implementation of technology must have the effect of shrinking employment.

There was a time when we used to say that technology would expand employment. That, perhaps, is true in the society as a whole. It is not true in the steel industry or in most of our other manufacturing industries because we are no longer in an unrestricted, almost uncapped surge of growth of consumption; and, thus, some of the old economic theories as applied to today's economy are not very valid.

At the same time, the American steel industry, as has been pointed out, is adapting to a temporary world glut of steel and overcapacity. I don't think this will go on forever. I think new sources of steel demand will emerge, primarily from the Third World, but not in time to make much difference to what we are dealing with.

This could be 10, 20 years down the road depending on a whole lot or unpredictable circumstances.

Meanwhile, obviously, the steel industry in virtually all countries is trying to adapt to this gap between available steelmaking capacity and current demand, and even immediately foreseeable demand.

It seems to me, therefore, that the essence of what we are confronted with is how the American industry is going to obtain the greatest possible share of the emerging steel market. Really, that is what much of what is going on is all about.

How well we do will depend on a lot of things.

I first want to point out that it depends a lot on the Government. I think Government policies and Government leadership or lack of leadership, whichever it may be at any given moment, will have a lot to do with the outcome of how we do in the steel industry.

I don't want to go into it. I do in my paper, somewhat, but that is not our real purpose here. Obviously, there has to be a more realistic strategy in relation to foreign trade policy and, I might say, a more courageous one.

There has to be much more aid given to the restructuring process through tax strategies and others, and we seem to be—at least the administration—drifting in the opposite direction. We have to place the steel industry in a much more favorable position than it is now in trying to have intercompany dealings to see that what comes out of the shakeout makes sense.

The existence of what I consider to be the outdated antitrust laws, which don't have much relevance to the world we now live in has clearly put a damper on very urgent needs within the steel industry to do some very fundamental restructuring.

To the extent that that is not made possible, I think we will suffer and our share of the world's steel market will suffer because we are not going to do things in a rational fashion. Shakeouts are taking place. They will continue to take place.

It would be well if they took place well instead of badly.

From this point of view it seems to me that it is very important that the Government exert some leadership and not be in an adversarial position, but rather do everything it can to accommodate the cooperation among the companies and the union and all other elements that might be brought to bear.

When one looks at this overall picture, it is clear that no matter what else happens there has to be a continued emphasis on manpower utilization. In the last several years it has increased.

It has gone beyond the hourly work force to the salary work force, the technical work force, the executive work force. It seems clear to me that that is in place and will continue and has several very serious implications.

One implication is that it becomes necessary, in the labor/management scene, to develop very finely tuned and very difficult strategies. In the forthcoming 1986 steel negotiations, we are confronted with some difficult possibilities.

The concept of labor patterns in the steel industry is virtually disassembled. Coordinated bargaining has disappeared not only by virtue of the decision of the companies involved, but by virtue of the facts involved in which the union was obliged to make all kinds of arrangements with companies that were failing in order to obtain some kind of survival.

It seems to me that whether economists like this or not, and most economists don't, in the real world it is inevitable that workers and their union will take steps necessary to preserve the firms that employ the members of the union.

I see no possibility of any kind of reversal of that kind of strategy. It has produced a good deal of chaos and tension within the industry. It makes the 1986 negotiations extremely difficult especially because of the lack of coordination among the companies themselves and the unions' lack of clout, to put it very mildly, in terms of trying to enforce any type of pattern.

So we are going to see very interesting and challenging negotiations which have a lot to do with this problem because if these negotiations are to be realistic they are going to have to pay great attention to costs, not only to the actual level of labor costs but also to unit costs meaning, again, manpower utilization.

For a union to be involved, as the steelworkers have been somewhat, in participation and perhaps even leadership of a program to reduce forces—to get more done with less people, to get people to operate more enthusiastically, to obtain arrangements whereby employees can use their skills and their talents which are boundless but have traditionally been unused, but which for the first time in the last couple of years are being called upon by companies which need those talents—and to engage in these kinds of strategies, especially in a decentralized bargaining forum, is extremely difficult.

It seems to me of great importance that the Government try to be helpful. I think the hands-off attitude which has dominated our labor relations policies in the last few years makes no sense in this situation.

Both the union and the industry need a force which is not only of aid in the ancillary phases of this problem, but also which directly makes it easier and even encourages these companies and this union to work more closely together.

It is very difficult for any company and the union to develop collective bargaining programs which are realistic in the absence of understanding what the competitor is going to do, will do, is required to do or is not required to do in an industry as competitive not only internationally, but domestically as this.

Finally, obviously these developments produce a very challenging problem of doing something about unemployed steelworkers.

In the period between 1960 and 1980, this was fairly easy to absorb. As Jack has pointed out, the rate of decline was such that turnover and minor adjustments took care of it pretty well.

There were contractual provisions. There were income security provisions. There were job opportunities in most of the localities involved, and there was relatively little trauma as the shrinkage continued to go on.

In recent years, this is no longer true; and certainly in heavily steel-concentrated areas we have very serious problems and we are not doing it very well.

I just want to make very clear that I do not buy the notion that the existing programs are very significant. They are not significant. They are not well done. They are still dominated by endless redtape.

Coming out of Washington, one can read press releases about the lack of redtape. Out there where these programs are, the redtape is a complete duplication of CETA all over again.

I happened to be the chairman of Governor Thornburgh's CETA Council for 4 years, and I don't notice anything different under this program. I can tell horror story after horror story of things going on in my community and in my State.

I think euphoria over the things that are being done is quite premature and unjustified on the basis of what is, in fact, taking place. We know almost nothing about the job market. Our whole manpower program is such that we have not kept up with the enormous rate of transition of the job market from manufacturing to nonmanufacturing to service producing.

We don't have a handle on this. We don't know how to relate to it. We don't even know how to identify it.

Most of our programs are really fundamentally oriented toward the type of labor economy which is disappearing, and that is more unfortunate.

Let me just close by saying that perhaps there is not sufficient appreciation of who these dislocated steelworkers are. These dislocated steelworkers are not redundant, unskilled, narrowly trained people with no education who are now thrown on the heap. That is nonsense.

These are educated people. These are very competent people. These are people who have been very successful and have a broad range of skills.

It seems to me that any manpower program, any approach toward aiding these people has to be directed toward who they really are. Our experience, in the research we are doing, is that because of the nature of these programs and some of the assumptions on which they are based steelworkers keep away from them in droves because I don't think they are really directed toward these people, their needs and their aspirations.

Thank you.

Senator QUAYLE. Thank you very much, Mr. Fischer.

[The prepared statement of Mr. Fischer follows:]

Testimony of Ben Fischer
Director, Center for Labor Studies
Carnegie-Mellon University
Before Senate Committee on Labor and Human Resources—
Subcommittee on Employment and Productivity
October 31, 1985, Washington, D.C.

My name is Ben Fischer. I am director of the Center for Labor Studies at Carnegie-Mellon University and teach labor relations and manpower policy at the University's School of Urban and Public Affairs. Prior to 1979, I spent nearly 40 years as a union official, first in research, then as an aide to Phil Murray and finally as assistant to the three subsequent presidents of the United Steelworkers of America. I am retired from the union and in no way do I speak for the union.

Our Labor Center at CMU is deeply concerned with changing labor relations systems and with public and private manpower policies. Both these subjects are profoundly impacted by the foreign penetration of our domestic steel markets. We are rigorously independent and attempt to avoid being bound by ideas and activities which merely reflect conventional wisdom.

I know it is fashionable to assume that labor relations in steel have been stormy and intensely adversarial. However, the record sharply contradicts this notion. The facts are too elaborate to recite here but we would be glad to review them in whatever manner might suit the committee or its staff. The record is clear that the United Steelworkers of America and the basic steel companies have been in the forefront of labor relations which have been problem-solving in orientation, sensitive to the economic environment and balanced in their approach to the problems of the employees and the firms that produce steel.

Nor is there a factual basis for the oft-made charge that a passive steel management submitted to extravagant union demands, thereby pricing steel out of the world market. First of all, a world steel market is a relatively recent phenomenon, and emerged so gradually that it was not until the 1980s that the extent of the problem became dramatically clear.

For more than 30 years, wage increases in the steel industry were about the same as those in autos, coal and other major basic industries. The pattern was basically that established through the GM formula instituted in 1948. From then until 1982, it was followed faithfully in the auto industry. The major deviations in the mass production industries took place in the steel industry during most of the 60s when the union negotiated far smaller wage adjustments as a result of its sensitivity to pricing difficulties and the early stages of market penetration from abroad.

The rate of wage increases in the major industries started to rise sharply only when the inflationary pressures went haywire; the COLA system of adjusting wages to reflect price increases after the fact was the major factor that accounted for very substantial raises, reflecting the runaway inflation rate.

There were only two a-typical labor policies in steel of real cost consequences. One was the widespread use of incentive systems which are designed to provide extra pay for employee productivity increases. Economists will agree that more pay for more productivity is anything but inflationary. It accounts for about ten to fifteen percent of the steelworkers average pay.

The other special steel wage cost is caused by the extensive income security system. When put in place in 1978, it was carefully designed to be cost effective. It was developed to deal with the all-too-common incidence of steel workers becoming dislocated by changes in the industry, a humane reaction to a serious social problem. The assumptions used would have resulted in only modest increased costs had they proved correct.

The income security program turned out to be far more expensive than anticipated; its architects had assumed that as one plant or operation eliminated jobs, opportunities would be available in other plants. Historical data supported the assumption that protection of employees with 20 years service would not result in a prohibitive cost.

As the steel decline developed, the cost assumptions turned out to be wrong; the facts defied the projections of every expert. The actual costs have far exceeded what had been anticipated --both in terms of corporate expense and human trauma caused by the extreme job losses.

It is fair to say that labor and management in steel made a sincere effort to respond to the trends in the society and in the industry in a responsible and humane fashion. By any reasonable standards, they did the right thing. Neither they, nor anyone else, foresaw the actual train of events which have marked the 1980s.

When the depth of steel's developing problems began to emerge, the parties made their 1980 agreement to take that into account. For the first time there was a concessionary agreement in a major industry, but that happened before the media invented the term "concession" and therefore it is not usually acknowledged in this instance.

The ensuing years have seen steel management and labor engaged in repeated efforts to try to adjust employment costs to the decline in the industry. Some of these efforts have been successful; others failed. Some related to a single troubled company; others involved adjustments in the overall industry wage and benefit patterns.

It is now clear that the industry and the union employees are not involved in some temporary decline of employment. For a quarter of a century the workforce has been shrinking, in good times and bad. In more recent years, the over capacity of the world's steel industry, or the inadequate demand if you prefer, has caused crisis in every steel producing nation.

Despite this, some nations especially those in the Third World, still build new capacity or expand what they have. The more traditional steel complexes are abandoning capacity, engaging in programs of consolidation and nationalization, even resorting to subsidies to try to somehow enable non-competitive facilities to survive.

Inevitably the economic problems in steel have taken their toll. The impact on companies, communities, employees and the steel union have been profound. The resulting environment now dominates what the managements and the union face as they prepare to conduct their 1986 negotiations.

The nearly 30-year old system of coordinated bargaining in steel has collapsed as individual companies and their union employees have chosen to resort to severe measures for survival. Patterns and traditions give way when the alternative is collapse, be it collapse of a company, a plant or even an operating portion of a plant.

The system of joint bargaining has been officially abandoned. It seems certain that each company will be meeting separately with the union and will attempt to address its own problems: price pressures, quality, employment costs, fringe benefits and perhaps most crucial of all, how to get more and better results with less manpower.

Furthermore, each company will be looking at its competitors, both foreign and domestic. Each producer is certain to be looking at his neighbor, concerned lest some other firm is gaining some advantage in making its deal with the union.

One can expect that the union will be deeply concerned with the survival and progress of each plant and each company. Yet the union has another concern, the most favorable wages, benefits and working conditions attainable.

When these kinds of complexities were addressed in a common forum representing an industry where the major competitive forces were domestic, the labor relations process was difficult, often extremely complicated. But now when competition impacts powerfully from Europe, Asia and South America, and causes domestic consumers to exert relentless pressure on prices and quality, the problems of labor relations strategy are compounded enormously.

One factor could aid in bringing some order to this confusion, namely supportive government policies. But these are nowhere to be found. Companies are constrained by anti-trust regulations. Unions are constrained by regulatory and restrictive labor laws. The administration's potential for constructive intervention is put out of reach by laissez-faire extremism, conflicts between agencies, and naive faith in the workings of an unfettered market place.

While high government officials urge aggressive programs of modernization and rationalization on the industry, other agencies pursue conflicting policies and still others fail to adjust to the public responsibilities for being supportive to the persons who become victims of progress.

There is no way the labor-management relationship can operate in isolation from the public policies which have so strong an influence on the steel industry and the labor environment. Yet, at a time of the greatest need, those policies are a source of confusion and are often hostile to the needs of the industry.

What then can we expect from the coming months?

It is too early to know what the United Steelworkers response will be to the enormous challenges it faces in the 1986 talks. It has made practical agreements with a growing number of companies departing from the central steel pattern. It is in no position to exercise economic coercion in any significant way, what with companies facing challenges to their ability to even survive. The union cannot ignore or somehow become insulated from the competitive realities of this truly global industry.

The parties need an aggressively sympathetic government. Instead, they suffer from a government which gives off contradictory and unworkable signals. How much better it would be if there were coordination of policies concerning trade, taxation, labor and other regulatory policies, and manpower support mechanisms. If only the out-dated anti-trust regulations, short of repeal, could be viewed realistically. The still prevailing notion among some regulators that steel prices can be manipulated domestically ignores the decisive part played by producers outside the U.S.

Perhaps the union could call the major companies together and seek out some framework for negotiations and for other joint efforts. It is doubtful that this will happen or that any such attempt would be welcomed or successful.

The logical thing would be for the government to summon the parties and join in seeking a workable strategy. Steel negotiations in the past have known such government activism, under Democratic and Republican initiatives. In fact, steel negotiations have been kicked off in the White House, terminated in the White House, monitored by Congressional committees. There have been many scenarios but this could be the first time that no discernible effort seems in the offing when the parties and the industry are in trouble.

It would be helpful if the public's involvement were somewhat more sympathetic. Perhaps the steel baiters could find some other sport. Their equal disdain for steel management and the steel union is hard to fully comprehend—but certainly the source of some harm.

Despite the superior attitude of many people toward steel management, reformers who have tried to do it better have invariably left behind a shambles. Steel industries around the world have been in trouble and it is a bit fantastic to suggest that something about producing steel makes management incompetent throughout the world.

For its part, the steel union is a large organization, representing employees in a variety of industries; it is a democratic union whose policies must reflect the feeling of its members. Anything that helps the members become properly informed can be a plus in the negotiations ahead; whatever undermines their view of the true state of affairs in their industry can only complicate efforts to make progress.

While it is vital that 1986 negotiations be as constructive as possible, it would be a mistake to build on expectations which lack realism.

The facts can be neither ignored nor defied. The steel industry of the world has capacity which exceeds existing demand. While the strategies of the producers and the consumers contribute to how large that gap may be at any given time, for some years to come the gap will remain substantial.

Two factors can contract that gap--increased demand (perhaps arising in the fairly distant future mainly from developing countries), and reduction of capacity. Most steel-producing nations are rapidly reducing capacity--as are we. But no cartel dictates national shares. What we do as a nation and through actions of separate companies operating in a largely unregulated economy will determine what share we can retain and capture.

Labor-management relations can help determine the share we achieve. While wage levels and benefit costs play a big part in this, perhaps the more vital issue is manpower reduction and better utilization of the employees at all levels.

A host of labor issues arise when forces are reduced and when changes are developed to improve the ability of employees to do their job. They are technical, difficult and so complex as to go beyond the scope of this discussion. Enough to point out that the steel workforce has been conditioned to obey orders, not to solve problems, not to innovate. Of course, this pattern is not unique to steel but almost universal.

Programs now underway are designed to change this, to enable and encourage employees to tap the enormous latent potentials of present steel facilities for better quality, greater productivity and a number of cost-effective results. This does not happen overnite. Habit and even tradition stand in the way.

The 1986 negotiators cannot escape the inevitable conflict between asking employees to perform better and the prospect of resulting job losses.

An answer to this dilemma lies in the search for better job security arrangements. The current steel programs center on income maintenance, with comprehensive income safety nets for employees with 20 years service. These devices are expensive and given the present state of the industry provide money instead of employment in the light of the absence of alternative steel jobs. It makes more sense to provide assurance of jobs. Employees prefer that. The industry would be better off. The society would benefit.

But no matter how well the parties do, they cannot do the whole job and ought not be asked to do so. They are not guilty of causing unemployment. The sorry state of the steel economy is not the result of some villainy committed by evil, or stupid leaders of steel companies or the steel union or by steelworkers.

It is clearly incumbent on the society to address the issue of the steel employee dislocated by cutbacks, shutdowns or improved manpower utilization. After all, these victims are Americans who achieved success in the labor force and are entitled to respect and consideration from their union, their company and their government.

It is nonsense to suggest that government cannot afford a workable manpower strategy. Unemployment is tremendously expensive and thoroughly wasteful. We are currently spending more billions than anyone has calculated on programs related to or caused by unemployment. They are hit and miss, contradictory, badly administered, overwhelmed by red tape and confusion. They are not even designed to realistically help people embark on new careers.

The claim that the post-CETA era has brought great improvements in manpower programs is not supported by any evidence. Bad as CETA was, its worst features have been perpetuated. Beyond this, our systems of unemployment insurance, social security, training, job service and research, are all divorced from any purposeful strategy. Taken together, they do not add up to a cost-effective way of doing things and they are not successful ways to encourage job creation or job placement.

It is no accident that when workers achieve success in their employment and suddenly are jobless, they stay as far away from public programs as they can—as long as they can. They sense the confusion and irrelevance, the red tape and the nonsense. In my state, if a steelworker hastens to seek education in pursuit of a new career, he loses his unemployment insurance entitlement, a dramatic example of utterly stupid public policy.

The American workforce is resilient. The nation need not develop a huge reservoir of people who are no longer employable. We continue to create jobs more rapidly than any other nation. The labor market does contain innate adjustment characteristics which do work.

I differ with those who tell you that somehow manufacturing jobs can be retained during the coming years. They will shrink because we are compelled to utilize manpower at every level much more prudently and more efficiently. They will shrink because the impact of radical new technology will be far greater on manufacturing employment than many traditional economists suggest.

The job growth in areas of support for manufacturing activity will continue to grow in proportion to declining manufacturing workers. More importantly, consumers will continue to use and demand more and more services which promise virtually unlimited growth of service employment of many kinds, including some not yet created. Job development strategies should concentrate on these trends.

So far we, traditional strategies haved proved inadequate in dealing with large pockets of employees that become dislocated from a given industry or region. When such disruptions are sudden and severe, so-called normal market forces cannot solve the difficulties unless we as a nation are willing to settle for welfare dependency and the tragedy of successful middle class people relegated to minimum-wage existence.

There are some people who are willing to have the nation accept such circumstances. The people privileged to govern ought not settle for so wasteful, cruel and traumatic an outcome.

How then might one summarize the impact of steel imports and trade policy on steel labor and on labor relations?

The traditional patterns are in a shambles. This goes for the way steel is priced, the way it is sold, the way it is produced. It describes what's happened to labor relations patterns including the methods of bargaining.

The current crisis impacts heavily on job security and makes income security far more expensive than had been anticipated. New ways of organizing manpower are required—at every level. Labor relations adaptations must be developed to achieve far better, more cost-effective results.

Moreover, foreign penetration, changing consumer trends and new technology combine to assure continuing decline in the number of steel industry employees—for years to come. Despite some claims, there is no evidence that the shrinkage of steel employment has bottomed out. Improved manpower utilization and drastic new technologies would cause continuing job shrinkage even if the industry's production were to stabilize or expand. At best, the pre-1980 rate of gradual decline will be resumed; that was slow enough to be digestible. The 80s have brought on sectoral and regional epidemics of job loss in steel, leaving in their wake concentrations of dislocated workers. There is no reason to believe that trend is behind us. We must be ready to cope with its continuation at least for a few years to come.

True, time will cure all ills, but in an intolerably inhumane fashion. The failure of government to address the problems of dislocated steel workers competently, humanely and constructively has produced suffering, and, if not reversed, will continue to do so.

Dislocated steel workers need the urgent attention of their government. A comprehensive manpower strategy is the least they should expect; that would be more affordable to the society than the present chaos, confusion, red tape and neglect.

Market forces are fine but in today's environment, they include the government. What the government and all of us do are ingredients of market forces. Avoiding responsibility by deferring to market adjustment factors can only permit further deterioration in the industry.

Thank you for this opportunity. Carnegie-Mellon University generally and its Center for Labor Studies specifically are interested in being helpful in identifying appropriate strategies related to the steel industry's difficulties and the urgent problems of unemployed steelworkers. Indeed, we are anxious to participate, and take a special interest in the issues related to the shrinkage of steel jobs, the need for supportive measures to aid displaced steelworkers in establishing new careers and updating public sector activities in identifying job opportunities, worker preparation for them and encouragement to the forces that can expand employment.

Senator **Quayle**. I want to yield to Senator Simon, who has a conflict, to begin the questioning.

Senator **Simon**. My apologies, Mr. Chairman. I appreciate your holding these hearings.

We have been marking up a bill in the Judiciary Committee, and now I have the synfuels thing on the floor that I am going to have to get over there to.

I appreciate having an Illinois citizen as a witness here, and appreciate the testimony of all three of you.

Let me get to one specific that is not directly trade related. I concur in what you are saying in the trade area, but the Congressional Research Service September 12, 1985 study, David Cantor, says:

> Modernization of the steel industry appears to be a much more significant factor than imports in explaining the decline in employment in the United States steel industry.

You mentioned, Mr. Luerssen, the need for new technologies. I am not critical of United States Steel on this, but something is wrong with our policy.

When we need new technologies, United States Steel here, 3 years or so ago, spent $6.5 billion to buy Marathon Oil. Now the Washington Post, this morning, says, "United States Steel will buy Texas Oil and Gas, $4.3 billion deal," here.

What are we doing wrong? You know, buying Texas Oil and buying Marathon Oil is not going to dig one more oil well in this country. It is not going to add one thing to the productivity of this country. It is not going to create one new job.

We ought to be talking about how we get to those new technologies. How do we change our tax laws or our antitrust laws, or whatever it is, so that, in fact, we get steel to invest in steel to build a better tomorrow.

I will address that first to you, Mr. Luerssen, but I would be interested in the opinion of Jack Sheehan, who is an old friend, Mr. Fischer—any of your responses there.

Mr. **Luerssen**. First, let me remark a bit about that United States Steel/Texas Oil and Gas deal as I understand it.

If, in fact, that acquisition is made by the issue of equity on the part of United States Steel, that in effect will strengthen United States Steel as a steel company. If you look at all of the steel companies in the United States, each one is trying to move in development ways that will take out some of the cyclicality in our business and will give us a stronger financial base from which to issue debt in the future and from which to issue equity.

I am not critical of the United States Steel deal because I don't think it takes $1 away from investment in their steel business. I don't know what Dave Roderick's program is. He doesn't consult with me on these things. [Laughter.]

Were I in his position with that opportunity, I would have done the same thing, exactly the same thing.

Senator **Simon**. If I may just interrupt, does it not make more sense from a viewpoint of national policy for us to spend that $5.9 billion and the $4.3 billion soaks up the capital market. It ends up sending interest rates up. It does not add to our productivity. It does not move on those new technologies you are talking about.

Now, how do we get United States Steel or Inland or anybody else to say, if we are going to spend $6.5 billion let's do it modernizing the steel industry; let's develop new technologies?

Mr. **Luerssen**. I agree that the Government has a role that it has abrogated in the past. The Government has not been supportive of collaborative research in the steel industry in the past. The research programs of the National Science Foundation have not been directed toward industrial development, basic industry development activities.

We have an initiative before the Congress at the present time that is called the Keyworth initiative. It is in the form of some proposed legislation at the present time and it looks toward the generation of leapfrog technologies that would be applicable to the steel industry in the United States, and it is running into all kinds of trouble.

In those things I think that we, as a Nation, must wake up not only to the technical problems of the steel industry and the opportunities that exist there, but to the whole manufacturing sector.

This one mill that I talked about is basically a Japanese development that we have adapted to our own purposes, but that particular facility has complete computer diagnostics in it, complete computer control, continuous processing from front to back; and that was done as a combined effort of a number of companies in the Japanese steel industry with technology that was developed over a reasonable period of time in a number of industries and allowed to be put together through the policies that exist in Japan which permit them to maintain a capital structure in their companies that is consistent with modernization.

Here, in the United States, as I think Ben Fischer pointed out, we are now faced with a tax program that would be very punitive to the manufacturing industry. If you look at what is in the Ways and Means Committee program today with respect to the depreciation schedules and investment tax credit, you will find that for machinery and equipment in effect what would be imposed upon manufacturers would be a 20-percent increase in the cost of that machinery and equipment.

Now, that is not the way to incentivize the development of manufacturing in the United States. So we not only need the positive things, we have to have some removals of the negatives as well.

Mr. **Fischer**. It seems to me, Senator, that unless the steel industry both is profitable and has pretty good prospects for being profitable, people are not going to invest. Wheeling-Pittsburgh stepped out way ahead and got money here and there and invested in modernization, and could not pay the bills.

I don't think that is a good signal to the investment community.

So it seems to me you cannot separate the desire of getting technology from the interest of investors in this particular industry and its prospects. In any event, while I think this still has to have attention, I agree with Frank.

This has nothing to do with United States Steel's gas and oil strategy. I don't think that takes money away from steel. I think that makes good journalism, but I don't think it has much to do with economics.

Unless there is a great turnaround, the emphasis in steel is going to have to be on better manpower utilization because that certainly does not cost any money. Perhaps, in many ways, we have an edge over some of our competitors for lots of cultural and other reasons; and I think there are tremendous potentials for becoming more productive just by organizational changes and organizational policies.

Mr. **SHEEHAN**. Yes. Senator Simon, with regard to diversification of steel assets, certainly an argument has been made that in the kind of a cyclical market in which we are the steel industry may solidify itself if it has some nonsteel holdings.

However, as you well know, when United States Steel purchased the oil company, there was a great deal of criticism of that. It sent a signal that perhaps steel was not where they wanted to be.

Presently, in the midst of the attention that we are putting on the steel industry problems, especially with regard to the negotiation of import restraints, whether it is good economics or not to diversify further, the symbolism is going to be harmful.

Now, I fully recognize, however that, and this is a point that maybe, as policymakers, you would want to take a look at and it is a point which Prof. Ben Fischer—an old colleague of mine but I did not call him Professor before—also indicated that nobody is going to invest in a declining industry. If, indeed, the steel industry, Inland Steel, for instance, feels that the marketplace for competition is going to be so uncertain because of unfair trade practices, then it may not just be United States Steel that will be moving out.

I think what we have to do is put two factors together. Are we coming in with an aggressive trade policy to make sure that that marketplace will not involve unfair competition?

If we are trying to put in place a program that assures that, then I think it is most appropriate from a public policy point of view that the industry commit its resources to that sector. As a matter of fact, the Steel Import Stabilization Act currently, by statute, requires that steel industry net worth must be committed to steel industry investment.

Now, I don't know the particular financial arrangements regarding the United States Steel/Texas Oil arrangement, but there is a statutory requirement now that net worth must be committed to the steel industry. I would assume that somehow or the other that requirement or, if you wish, prohibition is not being violated.

Other steel companies of the world have this diversified base; but for the steelworkers, I must say that we would look upon this situation rather pessimistically because while capital is mobile steelworkers are not. While mobile capital might find a more secure base, when it does we will not find a secure steelworker base.

So I must indicate that to you, Senator. I hope the United States Steel transaction is not a bad omen. But it is an indicator that we have problems in the steel sector. We have an insecure market due to unfair trade competition.

Hopefully, the President's program will correct that, at least for the 5-year period. Certainly, Ben has made some reference to the fact that the Government has a responsibility in this area.

The steel industry may not be investing in modernization, and Mr. Luerssen made some reference to the Keyworth Research Development Initiative. But has failed to receive any support on the Senate side.

I have a figure that indicates that our major steel companies overseas are investing almost 2 percent of their annual sales on research, whereas, in the United States, it is less than one-half of 1 percent.

The Federal Government, by the same token, is committing very small research efforts to the private sector, but for steel it is below 2 percent while its support for other sectors is as high as 33 percent. In particular, the other sectors are in the defense industry, space exploration and energy production.

Well, is that also a signal that is being sent: that steel industry research and steel industry modernization is not worth pursuing? If it is not, well, then, we are going to suffer the consequences in the competitive marketplace.

Senator SIMON. I thank the three of you, and I thank you, Mr. Chairman. I apologize for being in and out.

Senator QUAYLE. Thank you, Senator Simon.

Let me ask you specifically concerning this story that was on the front page of the paper this morning concerning our threat to our European trading partners on steel: that to get an agreement we will threaten an embargo.

I am just quoting from it. It says:

> While other steel suppliers, including Canada and Japan, have cut back their shipments in response to Reagan's call for voluntary restraints 13 months ago, the European producers have increased their sales to the United States 17 percent in the first 8 months of this year.

I would imagine that this is a litmus test to the administration if, in fact, they are going to be serious about enforcing what they said in 1984 about the voluntary restraint agreements and the bilateral negotiations that went on with these countries.

Do you perceive this as a litmus test, and how important is this to really continue our strategy that has been devised to give the steel companies time to modernize, time to increase productivity, and also time to make sure that we can deal with unfair and subsidized steel that is coming into this country?

How important is this issue? Do you want to begin, Mr. Luerssen, and I will also ask Mr. Sheehan and Mr. Fischer.

Mr. LUERSSEN. The successful conclusion of the EEC negotiations is essential to maintaining the President's program in place. If that negotiation relaxes to the point where the other countries around the world perceive that the Europeans have been given a favored place in this market, the others have threatened to pull their agreements.

I think they would be justified in doing that. So, it is very essential that that European agreement be put in place on an equitable basis as compared to agreements that now exist around the world with the South American, Japanese, and other countries.

There is, of course, this political problem in the European Community. There are two countries in that Community that produce steel and market it fairly in the United States, and then there are all the others.

To bring together those diverse interests into a package that two would feel is overrestraining is a difficult problem. So I believe—and I, myself, have made a personal recommendation to Mr. Yeutter and recommendation through the Iron and Steel Institute—that, in fact, European steel be embargoed if we do not reach a prompt agreement.

I have also recommended that to get the President's program in place in the other countries that have not signed up, such an embargo should also be imposed on them by about the end of the year. That will certainly bring people to the bargaining table and will get this problem behind us.

What is happening is all kinds of deviations of steel from steel-producing countries into nonsteel-producing countries for transshipment to the United States. There is foreign steel coming through the Canadian system, through Canada, being imported into Canada and flowing across our borders from Canada into the United States.

The Canadians freely admit this and they have not done anything of substance to counter it. I would disagree with the article this morning that the Canadians have been good performers in this market. They have been bad performers.

They have not come to agreement with our Government with respect to any semblance of restraint on Canadian steel entering the United States. Above and beyond that, we have this problem of the foreign steel flowing through there, as it is through many other countries.

So if we are going to get this President's program in place, we are going to have to do it with stern measures. I think the only way to bring these people, our foreign competitors, to the bargaining table in real terms is to embargo.

I go to international meetings of the steel industry and I sense around me all of these other people cutting up the U.S. steel market, this steel market, making side agreements, whether they are written or oral, as to who is going to have how much of this market.

If anybody in this room thinks that there is a lot of fair steel trade affecting the United States, they are wrong.

Senator **QUAYLE**. Mr. Sheehan?

Mr. **SHEEHAN**. Yes, Mr. Chairman.

I would say that it is more than a litmus paper test of the administration's intent to enforce the negotiated arrangements. Without a continuation or an extension of the EEC arrangement, there will be no import restraint program in place because the Common Market represents a very substantial trading partner to the United States.

If no EEC restraints are in place—if, indeed, our negotiators are unable to negotiate an extension of that agreement—then all the other agreements, I would say, will ultimately become null and void.

So it is much more than a litmus paper test. Failure to extend is a very serious threat to the administration's effort to develop the voluntary restraint agreements for the steel industry.

I would like to continue that comment just a little bit more. There is another report from the Congressional Research Service which I think is very well done with regard to the voluntary restraints agreement. David Cantor, who was mentioned already, wrote this one.

It indicates that the EEC arrangement, which we are now in the process of trying to renegotiate, controlled only certain steel mill items—around 13 steel mill products. There were other categories that were not under control.

It is those other categories precisely whose exports were subjected to the unbelievable acceleration. Having been controlled in one area, European steel exports came out through the uncontrolled areas: Pipe and tube for instance is one category, and the other categories which are called consultation products or semifinished products. There has been a very high market penetration since 1982.

It came to a situation earlier this year that the administration did, indeed, embargo pipe and tube products into the United States so that the European Common Market would sit down and negotiate restraints in those arrangements.

Unfortunately, it looks like we are bumping up against that deadline again. Certainly, that tactic that we have to embargo those products is probably the only weapon we have to move forward to make sure that the EEC extends that arrangement, to cover all of its steel mill products.

Indeed, we are asking for some rollback in the total aggregate of imports coming from the Common Market because they accelerated them during this period in which those items were not under restraint.

From the steelworkers point of view, I would like to indicate—I mentioned it in the testimony—that one of the sticking points in there is the control on semifinished slabs, a most important element in the extension of that agreement.

So, Mr. Chairman, without an extension of the Common Market arrangement we do not have, then—we simply do not have any steel import program in place. We do, indeed, have a steel import problem.

Mr. **Fischer**. Mr. Chairman?

Senator **Quayle**. Yes, Mr. Fischer.

Mr. **Fischer**. Just one remark. I don't purport to be an authority on international trade. I know something about negotiation.

It seems to me a central shortcoming in this whole venture is that everybody around the world who has any sense knows that all they have to do is look in the direction of Moscow and we tremble.

It seems to me as long as that is the circumstance, our capacity to negotiate and our capacity to enforce agreements is minimal; and, somehow, I think we will have to straighten out our perspective of the political realities and the economic realities of the world because people are not foolish and they know how to twit us, and they do it quite regularly.

Senator **Quayle**. I have one final question. What are some of the specific unfair trade practices and subsidies that are going on in the steel arena?

What do you consider as an unfair trade practice? And what countries are subsidizing specifically that gives you this unfair trade practice?

I guess I am looking for a definition of what we ought to be really making sure does not happen as an unfair trade practice.

Mr. **LUERSSEN**. There are, of course, several elements to the answer.

One embodiment of unfair trade is to sell into the U.S. market at a price which represents lower than full cost of production plus shipping and marketing in the United States.

Senator **QUAYLE**. And that is happening.

Mr. **LUERSSEN**. That is happening.

Senator **QUAYLE**. Do they have export subsidies like in agriculture?

Mr. **LUERSSEN**. Yes.

Senator **QUAYLE**. How do they do that?

Mr. **LUERSSEN**. Well, some countries employ a value-added tax program that is forgiven against exports from the country, but applies against imports.

Senator **QUAYLE**. Through the tax structure.

Mr. **LUERSSEN**. Yes. Some countries do it through the tax structure, in part; and, in total in some countries, it is done because the industry itself is under government ownership and is openly subsidized.

So costs are not an important element in that respect. Employment is a more important element than cost and the Government, rather than pay for the consequences of unemployment or restructuring, will, in fact, pay to subsidize the industry.

Senator **QUAYLE**. In which countries is there government ownership? Would Korea be one?

Mr. **LUERSSEN**. Well, Great Britain for one.

Senator **QUAYLE**. Great Britain, steel?

Mr. **LUERSSEN**. Spain for another; Italy for another. You know, I can go right down the list.

Senator **QUAYLE**. Government ownership.

Mr. **LUERSSEN**. Brazil and Argentina, Venezuela, Mexico. I can name them all.

Senator **QUAYLE**. Government ownership.

Mr. **LUERSSEN**. There are very few countries where you can say that there is a free and independent steel industry operating there under the same conditions that free enterprise operates in this country.

Senator **QUAYLE**. OK.

Mr. **SHEEHAN**. Mr. Chairman, it might be appropriate at this point in the record for us to submit two things. One is a list of all the countervailing or antisubsidy petitions that have been filed by the steel industry against a variety of steel exporting countries, which list, by the way, identifies the fact that in most of them the Commerce Department has already made a preliminary finding that subsidies do, indeed, exist in those particular countries.

The second document that might be, I think, very informative in view of the question is one that, in 1981, the steel industry filed against the Common Market. There were individual national subsidy programs in place which were in contravention of the GATT rules and obviously in contravention of our own rules.

I think that document would identify what we are talking about in terms of the variety, the whole scope of unfair trading practices.

I would like to add to this that in some countries, however, that were not reachable by our own antidumping and subsidy laws there are practices that are generally described as industrial targeting, sometimes described as industrial policies. There are efforts in the Congress to expand the definition of subsidies to include these kinds of discrete programs by governments to insulate their industry, to build it up so that it can get into the export market.

I think it would be appropriate, if we could, to introduce that into the record. As a matter of fact, from the President's point of view it is the basis for them to negotiate these quantitative restrictions in view of the fact that there have been these wholesale findings of unfair trade competition.

Senator QUAYLE. Yes, I think that would be helpful to get to some of the specifics. I don't necessarily need all of the suits, but if you would just sort of itemize the specific practices that are going on that are in this category.

Mr. LUERSSEN. That information is available. I will ask the institute to provide it.

Senator QUAYLE. OK. As a final comment, particularly Mr. Fischer, I would be more than happy if you would submit to us, since this is the subcommittee that has oversight on the JTPA, some of the horror stories that you referred to and the red tape.

One of the primary emphases that we placed on that was to decentralize, was to give the flexibility and to try to make this a far better system than what we had. Particularly in Title III in the dislocated worker program.

I know that we have an ongoing program up in northwest Indiana and Chicago. We have labor and management working together. The Department of Labor has come forth with quite a bit of money.

To my knowledge, I think that program, in fact, is focusing on and serving a lot of the steelworkers, and doing it on a very decentralized, much more flexible basis than they have had in the past.

As the primary author of that, I would be very interested in any kind of detailed——

Mr. FISCHER. Well, I will give you just very quick examples.

Senator QUAYLE [continuing]. Examples of some problems that you have because we are committed to that program.

I also agree with what Mr. Sheehan said that we have to have not only the training and retraining, but the income security and income maintenance while we have this transition.

It is a very important part of our overall trade policy.

Mr. FISCHER. Well, I would be glad to do that within the next couple of months.

Senator QUAYLE. I would be very interested in it.

Mr. FISCHER. But let me just quickly cite two things which are right in front of us.

By the way, where labor and management develop a program such as has been done with many of the steel companies and the steelworkers union, those tend to somehow overcome some of the problems. One reason is because a lot of the personnel and some money are put in from private sources, and that helps to activate and take care of delays, and things of that sort.

In one program we were associated with that was very successful, the 2 years you had to wait for the Federal funds to get there became tolerable because there was a lot of company and union money in the situation to pay the bills while they were waiting for the money to come through.

Pittsburgh has launched, theoretically, its first dislocated worker program. It begins October 1, 1986. Nobody objects to it and it has received all the appropriate endorsements.

We don't have the program approved yet. It is very difficult to launch a program October 1 when it has not been approved October 1.

Furthermore, the law says, and the regulations, that it must terminate June 30. There is no way this program that was supposed to start October 1 and terminate January 30 can start January 1 or February 1 and terminate June 30.

Senator **Quayle**. Who says it has to terminate January 30?

Mr. **Fischer**. That is the end of the year so the allocation is over. So you have to file for a whole new program in order to get something into the next fiscal year.

Now, I know, up here, one is not too sensitive to that; but down there these are the nitty-gritty annoyances that discourage people, that make it impossible.

One final comment I might make. Carnegie-Mellon, after some time, arrived at an understanding between Lynn Williams and President Cyert, the president of CMU, that we ought to do what we are doing in France—we cannot do it in the United States, but we are doing it in France—which is developing a very extensive program of computer literacy training for dislocated steelworkers and for dislocated workers.

This is in full force in France. We are partners in this particular proceeding.

We have not been able to get the first dime for this in the United States.

Senator **Quayle**. OK.

Mr. Sheehan?

Mr. **Sheehan**. Yes. Mr. Chairman, in terms of the steelworkers' involvement with the JTPA Program, I would like to indicate that our observation of how it is functioning is not completely negative. It sounds like two negatives I am putting in there.

Our involvement with it has so far been, on balance, a favorable one.

There is the redtape issue that we encounter. As a steelworkers' union and maybe in a sense as an industry, we are more national in our operation and structure machine. The JTPA program however requires an enormous amount of decentralization procedures.

Now, I guess in some circles that may be viewed as an improvement. I have no comment as to whether it is or it is not, except in our situation we find that we have to go to so many local levels of government in order to finally effectuate a program in which we may be working with displaced workers of a corporation at a national level.

We have to go to the Governor's office. We have to break it down into the delivery areas. We have to break it down to the local PIC counsels. There are a lot of officials that we have to touch base with, if you wish, even though we are ready to go.

As a case in point, just recently the Department of Labor released $10 million for a steel-specific program. Those funds have not yet been utilized because of the enormous amount of local contacts that have to be made.

Now, I cannot say that if it were all federally directed whether we would still be running into these kinds of logistic problems, but I think I ought to indicate, nevertheless, that the JTPA Program does involve a lot of contact at local levels.

For a union and for an industry or a company that really wants to do something across the board at different regional facilities, it is too bad that we could not somehow or the other, on a sectoral basis, go at it from a national or a companywide point of view. That is one of the things that I understand we have a concern about.

Nevertheless, we are intending to utilize the JTPA Program to the maximum. We are glad that it is there. It does open up this new element of title III—which is the displaced worker—puts the focus on that, drives the money into that area.

Those funds are necessary. Those programs are necessary.

Another aspect which is incorporated in the bill itself is the definition of training, which is not just vocational training or job training, but sometimes involves job-search-related activity.

I think it is a misinterpretation to indicate that if a worker is dislocated then his skills, themselves, are now obsolete. Many times, our workers' skills are not obsolete, but they need to get involved with the other aspects of locating jobs, with the counseling that is at stake here.

The JTPA bill does provide that opportunity. You do not need to take a machinist and then train him to be an electrician. It may not be necessary. That machinist could probably do other similar type jobs in his area. The JTPA Program recognizes that by assisting him in job search skills.

That is an aspect of the program to which I would like to give credit.

Mr. LUERSSEN. If I could just take 1 minute to say that you are absolutely right. In our area, we have been able to work very well with Lieutenant Governor Mutts and with local 1010 of the steelworkers.

We have put together a very good program. It seems to me that what is required there, if it is going to be a locally oriented program, is a mechanism to incentivize the local organization to do its job properly.

We had no difficulty putting together our program and that center has been very, very effective at Indiana Harbor.

Senator QUAYLE. Now, you put it together locally, you came up with the idea, you came up with the matching funds. You touched base with us, you touched base with John Mutts, and we got over to the Department of Labor in a very reasonable, short period of time that that was accomplished.

I might say that we are going to look at some technical amendments that we might be able to make in JTPA this year. So any specifics that you all have would be very interesting.

Mr. **Sheehan**. Just one fast comment.

Senator **Quayle**. Yes.

Mr. **Sheehan**. When we say it has been done locally, I think you would understand, Senator, that while there has been this local involvement, nevertheless it did involve the international union and its trained staff which had to go there.

So the mix remains.

Senator **Quayle**. Well, we would be interested in correcting them.

Mr. **Fischer**. Well, let me just, if I may, add one item to this.

The present perception of training, which really is incorporated from the CETA Program with very little revision, assumes what we call job-oriented training. It is my conviction and the conviction of many of our colleagues that what is required in this labor market and this economic environment is training which is not necessarily job specific.

People have to know something about lots of subjects that they have had no opportunity to be exposed to in order to be effective in the job market as it exists. By the way, we don't know very much about the existing job market, most of which exists completely outside of the public agencies.

Most of the jobs in my town—I think 95 percent of the jobs, or 97—are filled outside of the job service and the Government has nothing to do with that whole process.

Senator **Quayle**. Senator Pell?

Senator **Pell**. Thank you, Mr. Chairman.

I just wanted to congratulate you on this hearing. I ask unanimous consent to have inserted in the record which I was not here to make.

I look forward to reading the testimony of the various witnesses.

Senator **Quayle**. Thank you very much. Without objection, your testimony will be inserted.

The next subcommittee meeting will be on the impact of trade on the automobile, telecommunications and electronic components industries, November 12 at 10 o'clock.

Gentlemen, thank you very, very much.

The subcommittee is adjourned.

[At 12:26, the subcommittee was adjourned to reconvene at 10 a.m., Tuesday, November 12, 1985.]

IMPACT OF TRADE ON EMPLOYMENT

TUESDAY, NOVEMBER 12, 1985

U.S. Senate,
Subcommittee on Employment and Productivity,
Committee on Labor and Human Resources,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:20 a.m., in room SD-562 Dirksen Senate Office Building, Hon. Dan Quayle (chairman of the subcommittee) presiding.

Present: Senators Quayle and Dodd.

OPENING STATEMENT OF SENATOR QUAYLE

Senator Quayle. The committee will come to order.

I apologize for being a bit on the late side today. Actually, I was running behind schedule and then went to the wrong room, if you can believe that.

Today is the third in a series of trade hearings that the Employment and Productivity Subcommittee has had. The past witnesses have talked about trade in the macro and micro sense. We had the Secretary of Labor before us; we had a number of economists on the first day; we had on the second day representatives from the industries of agriculture and steel. Today we are going to take a look at the auto industry, the telecommunications industry and the electronics industries.

I might just say that in the past the witnesses have been somewhat in agreement that the trade deficit is related to our own country's deficit. It has been said a number of times that the best way to help out on the trade problem, whether it is the value of the dollar, increased competition or whatever you want to do, is to go ahead and just reduce the budget deficit. That would be a big starting point, and that has been said time and time again. So I think that that is certainly clear.

Today the industries that we are going to examine have been greatly impacted: the auto industry, which has suffered a great deal in the past, very important to my home State of Indiana, has had somewhat of a rebound. I think we are getting back on our feet. We seem to meet the import situation a little better than we have in the past. There seems to be a greater degree of harmony between the employer and employees; labor and management seem to be able to come to grips with some problems. But there is still a tremendous job loss that has resulted from this, and coming from a State like mine, which we rank third in the number of auto workers in the country, this is something that we pay very serious attention to.

There are also statements that we have many barriers preventing our autos and trucks from going overseas, particularly to Japan. I think we need to take a good, hard look at that and see if those barriers are fair or unfair.

In the electronics industry, we will look at the International Trade Commission decision that the semiconductor industry was unfairly injured by low price competition from Japan. I would hope that the witnesses, as they go through their testimony, will point out where these unfair subsidies really are. Wage differential is not a subsidy. That is what you call basic competition; if somebody's going to have cheaper labor, you know, that is something we will have to deal with.

But what is and what can we identify as a subsidy? What is really in the arena of unfair trade and how do we sort out those that legitimately need help and those that perhaps do not need help? And that is sort of an issue that I have been grappling with throughout the course of these hearings.

The telecommunications industry, like the electronics industry, has some problems related to the government owned and subsidized telecom systems within other countries. And when you have government ownership, obviously it is going to be a different standard than what you would have if you had outright competition.

That is the background of this hearing. On our first panel, we have Mr. Robert Crandall, who is a senior fellow at Brookings; Mr. Thomas Walton, who is director of economic policy analysis for General Motors Corp.; and Mr. Edwin MacKethan, who is the director of public policy issues, with the corporate strategy staff of Ford Motor Co.

The United Auto Workers had to cancel. They canceled Friday because of an emergency meeting that is taking place in Detroit.

So with that, I think we will go ahead and proceed, and we will begin, according to my list, with Mr. Crandall.

Welcome and proceed at your will.

STATEMENT OF ROBERT W. CRANDALL, SENIOR FELLOW, THE BROOKINGS INSTITUTION, WASHINGTON, DC; THOMAS F. WALTON, DIRECTOR, ECONOMIC POLICY ANALYSIS, GENERAL MOTORS CORP., DETROIT, MI; AND EDWIN R. MacKETHAN, DIRECTOR, PUBLIC POLICY ISSUES, CORPORATE STRATEGY STAFF, FORD MOTOR CO., DEARBORN, MI

Mr. CRANDALL. Thank you, Mr. Chairman. It is a pleasure to be here.

I have a very brief statement which I will summarize in an even more brief fashion.

Your concern here is with the effect of trade deficit on various industries, and in our session, the automobile industry. I think it is useful to go back and look at a little bit of the background that contributed to the import problems that the automobile industry now faces.

The trade deficit itself did not begin to widen substantially until we recovered from the 1982 recession with a very large Federal budget deficit, thereby putting tremendous pressure on our scarce supply of savings in this country. But the import problem of the automobile industry began long before that. In fact, there were pleas for protection from foreign competition from the United Auto Workers and the Ford Motor Co., even prior to the acceleration of the value of the dollar in 1980. In fact, at 1978 and 1979 exchange rates, when the dollar was at its bottom in recent decades, Ford and UAW were arguing that the industry needed temporary protection or escape clause relief because of import competition from Japan. It was during this period that import penetration in the automobile industry rose from the 15-percent level, around which it had vacillated in the early to mid-1970's, to the nearly 30-percent level, which it almost achieved in 1982. This was prior to the large budget deficits, prior to the emergence of the large trade deficit, and even prior to the recovery of the dollar in 1980.

So that even though the strong dollar has contributed to the problems of the automobile industry, its competitive problems began long before the appreciation of the dollar.

Why do we see the auto industry suffering from import competition and loss of market share? I think there are a variety of factors, not the least of which is very slow productivity growth through the late 1970's and an increasing cost disadvantage vis-a-vis the Japanese, both because of slow productivity growth and because of rapid wage escalation. The average wage paid by the domestic automobile industry rose to over 60 percent above the average industrial wage in the United States. This is not as large a premium as in the steel industry in the same period, but then the disutility of working in a steel mill is far greater than that in the automobile industry.

Second, as I mentioned, productivity growth slowed in the late 1970's and, in fact, became negative from 1977 to 1982 in the automobile industry as demand weakened.

And, third, relative product quality declined; in fact, the reliability of the U.S. automobiles relative to Japanese automobiles declined almost continuously throughout the 1970's. Even as far back as 1970, Consumer Reports was showing greater reliability in the first few years for Japanese imports, but only by a narrow margin. This gap widened substantially through about 1981, and as a result, I think, the United States consumers looked increasingly to the Japanese for efficient low-cost transportation.

Finally, we all know that the Shah was toppled in late 1978 and the consequent 1978–79 increase in oil prices increased the demand for smaller cars which were being produced more efficiently and more attractively by the Japanese. And this obviously led to an acceleration in the import penetration of automobiles in the United States.

However, since 1981, the price of gasoline has fallen. A couple months ago the value of the dollar began to recede, yet I think it is fair to predict that even with lower gasoline prices and even with the yen rising toward 200 to the dollar from 240 to 250 of a couple of months ago, the United States automobile industry is still going to have substantial import pressure from the Japanese.

Since 1981, we have had import quotas on cars from Japan, from 1981 through March 31 of this year as encouraged by our Government in the form of voluntary export restraints from Japan at 1.68 million for the first 3 years, 1.85 million for the fourth year. The

Japanese themselves are limiting their exports by MITI directive to 2.3 million cars this year.

These quotas have had a substantial impact upon domestic prices and, therefore, domestic industry profitability. As of mid-1984, my calculations suggest that the price of an average Japanese car in the United States was $2,500 higher than it would have been in the absence of these quotas. This comes from a rather detailed econometric analysis of vehicle prices. In fact, if you look at the price differentials between a Toyota Corolla or a Nissan Sentra in the United States and in Japan after adjusting for transportation costs and some additional regulatory costs, you will find that those numbers are very close to $2,500.

This has caused domestic car prices to be about $800 to $1,000 higher last year than they otherwise would have been; in other words, without the quotas, roughly two-thirds of the industry's after tax profits would have disappeared last year. So there has been a substantial modicum of protection in this industry.

One might ask if, in this period of import protection, there has been an improvement in industry performance? I think it is a little early to tell because of the enormous lead time in industry investment decisions, but we can look at it in a couple of dimensions.

First of all, productivity has undoubtedly rebounded substantially from its 1982 lows. From 1977 to 1982 it declined; from 1982 to the present it has been rising. As a matter of fact, the Bureau of Labor Statistics released at 10 a.m. this morning the 1984 numbers. It appears that productivity has increased by about 26 percent from its bottom in 1980.

In terms of wage costs, unfortunately, under trade protection it was very difficult for the companies, particularly Ford and General Motors last year and Chrysler this year, to resist further increases in their wage costs relative to the average industrial worker. That margin which had been declining slightly is now starting to rise again and rise to about a 60-percent premium over the average industrial wage—which, by the way, is about what an automobile worker makes in today's exchange rates in Toyota City; namely, the average industrial wage in the United States.

As far as reliability goes, it is perhaps too early to tell. There is certainly a tremendous amount of activity in Detroit directed toward the improvement product quality. From the numbers we see thus far, it appears that the Ford Motor Co. has improved the reliability of its cars substantially. We do not see the evidence for the other companies. It is interesting that Ford was probably the slowest to move to new front-wheel-drive vehicles. Whether those two factors are related or not, we cannot be sure, but a rapid change of model lines can make the attainment of product quality, particularly in the U.S. industry, difficult.

So under trade protection, we at least see some improvement in productivity. We cannot yet tell whether product quality has improved. There has been in the last 2 years a substantial increase in investment. For the 4 years in which the industry was under quotas, its real capital spending was slightly below what it had been the 4 years before the quotas. But in 1984 and 1985, there has been a substantial acceleration to the point that last year capital spending in real terms in the automobile industry was at a record high. From that capital spending, we may see an improvement in productivity and maybe in product quality because increased robotization may lead to more reliable automobiles.

Finally, I think it is useful to comment on the development of Japanese automobile production in this country, particularly given, as you mentioned, your concern about automobile employment in Indiana.

The efficient Japanese automobile producers, fearing a continuation of trade protection for as far as they can see, are coming to the United States to produce automobiles. Virtually all of them with the exception of Subaru, Isuzu, Suzuki, and Daihatsu have announced their plans to invest in plants here.

With the exception of the Mazda plant, which will be in Flat Rock, MI, and will involve coproduction with Ford, most of these decisions have been in locations away from the Great Lakes. In fact, Toyota has a decision pending right now, and it expects to make an announcement soon. What we are seeing, I think, is a gravitation away from the Great Lakes by the new entrants into our automobile industry. We are also seeing that new entrants are likely to have much higher productivity than their American counterparts because they do not come in with the excess baggage of the union rules that the Big Four have in the United States.

I think we are more likely to see an increase in the Japanese share of this market over the next few years, whether produced in Japan or the United States. There is a substantial downward pressure on man-hours used per car; therefore, an improvement in productivity; and, therefore, in a slow growth industry, declining total employment in the automobile industry, as far as we can see, with a larger and larger share of that away from the Great Lakes. That does not paint a very pretty picture for the Great Lakes automobile industry. I think this area is simply going to have to settle in for a period of declining automotive employment.

[The prepared statement of Mr. Crandall follows:]

Testimony of Robert W. Crandall

The Brookings Institution[*]

Before the Subcommittee on Employment and Productivity
of the Senate Labor and Human Resources Committee

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before you today to testify on the effects of the trade deficit and trade protection on the automobile industry. As we all know, the automobile sector has contributed substantially to the trade deficit in the past few years. The deficit in automobiles might have been much larger if we had not asked the Japanese to limit their exports in 1981-85.

The Trade Deficit, Fiscal Policy, and the Value of the Dollar

The U.S. trade deficit began to widen dramatically in 1982-83 as the economy climbed out of recession with the stimulus provided by a large federal budget deficit. As government dissaving grew, the investment boom of 1983-4 could only be accommodated by an inflow of foreign savings. The dollar appreciated dramatically in 1981-84 despite a widening trade deficit, putting enormous pressure upon U.S. exporters and import-competing industries.

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[*] The author is a Senior Fellow at the Brookings Institution. The views set forth here are solely those of the author and do not necessarily represent the opinions of the trustees, officers or other staff members of the Brookings Institution.

The automobile industry has suffered an erosion in its competitive position due to the 1981-84 appreciation of the dollar, but it would be impossible to attribute most of the industry's difficulties to the high value of the dollar. The dollar's appreciation began in 1980 after the UAW and Ford petitioned for import relief. Even at 1978-79 exchange rates the industry was finding it difficult to compete with the Japanese in producing small cars.

The Decline of the U.S. Automobile Industry

Import competition is not a new phenomenon in the automobile industry. The industry has faced substantial competition from Europe since the late 1950s and from Japan since the 1960s. It even weathered the 1973-74 oil shock with little loss of market share to imports. From 1970 through 1978, imports accounted for between 14.5 and 18.3 percent of U.S. registrations. The second oil shock created a new wave of imports, but this time it seemed permanent. Imports approached 30 percent of the U.S. market in 1981-2 despite the fact that oil prices began to decline in 1982.

Nor can one ascribe the surge in automobile imports in the 1980s to U.S. fiscal policy and the rise in the value of the dollar. Imports rose at their most rapid rate in 1979 and 1980 while the dollar was at its lowest value in decades.

In short, while high real gasoline prices and a strong dollar undoubtedly had their effects upon U.S. automobile imports, they are far from the entire explanation. Even if the dollar and real gasoline prices fall substantially (and they have already begun to do so), one should not expect the demand for imported cars to decline very much.

The missing factor in analyzing imported automobile demand is relative quality. The Japanese producers have not only developed a substantial cost advantage over U.S. producers at a value of the dollar in excess of 200 yen, but they have succeeded in producing far more reliable automobiles.

As far back as 1970, Consumer Reports was showing a lower repair frequency for recent Japanese models than for U.S. cars. This reliability gap widened at a shocking rate through 1981. Other surveys of car buyers showed that consumers were more satisfied with the quality of Japanese imports than with U.S. cars.

This reputation for product quality undoubtedly contributed quite strongly to the continued rise in the U.S. demand for Japanese imports even after gasoline prices began to fall. The U.S. response was to impose a quota — or more precisely a "voluntary export restraint" — upon Japanese imports in 1981. These quotas continue, although in less stringent form, to this day.

The U.S. Automobile Industry Under Trade Protection

Since 1981, the U.S. automobile producers have operated behind substantial import protection. By 1984, the Japanese VERs had raised the prices of Japanese imports by about $2500 per car and U.S. models by between $900 and $1000 per car. Not surprisingly, the U.S. companies' profits soared. The largest three U.S. producers earned more than $10 billion in aftertax profits on sales of 8 million cars. Without the VERs, these companies' profits would have been at least two-thirds less.

Has the 1981-85 period of protection been helpful in restoring the competitiveness of the U.S. industry? The yen has risen from its low of 270 to the U.S. dollar to about 205 to the dollar. Nevertheless, if one were to ask the automobile producers whether they still need protection, I am confident that Ford and Chrysler would continue to respond in the affirmative.

All U.S. producers have recognized that they have three major problems: (1) low productivity; (2) poor quality; and (3) high wage costs. All have attempted to address (1) and (2) through capital spending programs and a variety of other employee incentive programs. As of 1985, we cannot tell whether these programs have begun to succeed. Clearly, productivity has risen from its 1980-81 lows, but productivity always surges during an economic recovery. Productivity growth since 1977 has only been about 2.5 percent per year, but it has been 8 percent per year since 1981. Thus far, there is very little evidence of a substantial closing of the quality gap with the Japanese although from recent repair-frequency data Ford appears to be making notable progress.

Productivity and quality may begin to improve with the surge in capital spending in the industry. In 1982-3, industry capital spending fell substantially despite the Japanese quotas. In 1984, however, the industry spent nearly 10 percent more in constant dollars than its 1978-81 average, and in 1985 total industry outlays may approach $15 billion, or nearly 30 percent more than the 1978-81 average in constant dollars.

The surge in capital spending and continuing attention to work rules may eventually close some of the productivity gap between the U.S. industry and its Japanese competitors, but there is little evidence of similar progress in wage costs. In 1977, the industry paid its workers slightly more than 150 percent of the total compensation received by the average U.S. industrial worker. By 1982, this had risen to more than 160 percent. Had the companies not earned enormous profits in 1984, caused in large part by the Japanese VERs, they might have been able to narrow this wage gap somewhat. Instead, both Ford and General Motors granted large wage increases in 1984, and Chrysler has been forced to follow in 1985. As a result, U.S. autoworkers continue to earn nearly 60 percent more than the average U.S. industrial worker (and the average Japanese employee of the major automobile companies).

In short, the U.S. industry has recognized its cost and quality problems, but it cannot hope to solve them while government protects it from competition. Changes in union work rules, moderation in wage rates, and an attention to product quality are more likely during periods of aggressive competition, not protection.

Industry Employment

Trade protection in the form of quotas can both raise domestic prices and reduce domestic output in an industry as concentrated as automobiles. Thus, the VERs may have actually reduced automobile employment in the United States as the industry raised prices during 1981-84. At best, the industry's employment was only marginally higher than it would have been without quotas.

Even after the quotas lapse next year, there is little likelihood that U.S. automobile employment will ever reach its 1978 level of 1,085,000 again. Success in this mature industry requires sharply higher productivity, but output is not likely to grow very rapidly in the years ahead. Thus, total employment is likely to fall rather slowly but steadily for the indefinite future.

Of greater concern to the midwestern states, however, is the location of automobile employment. If Japanese companies cannot increase their share of the U.S. market from Japan, they will do so from U.S. plants. By 1991, the Japanese may have U.S. capacity to produce more than 1 million cars, and most of this capacity will be located far from the major midwestern cities where the U.S. automobile industry has traditionally been centered. Thus, unless U.S. producers become more aggressive in lowering costs and improving quality, the Great Lakes area will continue to lose employment -- to the Sun Belt if not to Japan.

Summary

Trade protection for the automobile industry has not worked to restore its competitiveness. Even after the recent depreciation of the dollar, the U.S. producers are likely to have a substantial cost disadvantage in competing with imported small cars. The fear of continuing U.S. trade protection is inducing massive Japanese investment in U.S. assembly plants, but most of these plants will not be built in areas of traditionally high automobile employment. Moreover, the key to success in this slow-growth industry is higher productivity and therefore lower total employment. It cannot and should not be the goal of U.S. policy to increase employment in this high-wage industry. Restoring our competitiveness necessarily requires lower total automobile employment.

Senator QUAYLE. Well, OK. We will get a little better news, maybe.

Mr. Walton, before we get into any questions.

Mr. WALTON. Thank you, Senator. I am Tom Walton, director of economic policy analysis at General Motors. I am pleased to have this opportunity today to present our views on the impact of International Trade on Productivity and Employment.

We believe America's long-term interests are best served by having the industry respond to the rigors of competition. We have long supported a system of open international trade. Policies that restrict market access diminish the flexibility of this industry to remain competitive.

The discipline of open, worldwide competition has assured that American consumers can have access to the best products at the best prices. It has also encouraged the advancement of American technological innovation and industrial modernization, which has led to continued growth and more domestic job opportunities.

Now, some say that we cannot compete with Japanese firms. They say that even if we survive the current Japanese onslaught, there will be the new low-wage competitors from Korea, Taiwan, Brazil, and elsewhere.

To be sure, in the long run we will not be able to compete unless we change the way we run our business, and change is exactly what we are doing. We are upgrading our factories, modernizing our products, and are in the process of changing our structure and approach to business to meet today's challenges and get ready for the next century.

We intend to meet the challenge from overseas by streamlining our management methods, by improving union-management relations, fully utilizing the skills of our employees and our suppliers, and by making sure that they have the best possible technology to work with.

Toward this end, since 1980, GM has invested approximately $40 billion in new plants, tools, and equipment. This year alone we will spend approximately $9 billion. We have built new passenger car assembly plants in Oklahoma, Louisiana, Missouri, Michigan, and Kentucky. And we are building a new truck plant, as you know, Senator, in Fort Wayne.

By the way, we are very grateful for the help you have given us in getting that plant off the ground—and, of course, you have all heard of Saturn.

We have been equally active renovating our existing plants to bring them up to world class standards. Among them is our Buick City facility in Flint, MI, which is producing a new line of family-size front-wheel-drive cars. Mr. Crandall mentioned Toyota City; well, we have our Buick City.

This facility has been completely retooled with state-of-the-art production processes in cooperation with the UAW, and it will help ensure productive employment opportunities in Flint.

The recent Saturn labor agreement builds upon the foundation of cooperation achieved at Buick City and many of our other plants. The Saturn agreement is much more than a contract; it is a commitment by General Motors and the UAW to work together to build a competitive small car in the United States. It recognizes an understanding by GM and the union that our futures are tied. Neither GM nor the UAW will survive as strong entities if we do not work together to overcome the foreign competitive challenge.

Saturn will not only create a new labor-management order but will also utilize the most advanced production technology. It will benefit from GM's extensive investments in many emerging technologies.

For example, we have bought into a half dozen robot and machine intelligence companies to keep us on the leading edge, and we have added our own best thinking from GM research labs. Buying into leading companies in critical high technology areas is one of our major strategies. We bought Electronics Data Systems, a world leader in data processing and computers. We will soon complete the purchase of Hughes Aircraft, a major high technology company in electronic guidance systems, process engineering, and satellites

Now, all this technology represents a quantum leap ahead. And I might add it is a leap from a lofty starting point. In 1980, when the renaissance began, GM was already the recognized world leader in computer-aided-design and computer-aided manufacturing. Even then, we were the largest manufacturer of computer chips in the world.

The idea of hi-tech factories restoring the competitiveness of American manufacturers is not far fetched. GM is committing billions of dollars on this. Each new factory we build, or old one we renovate, is more technologically advanced than the one it replaces.

One of our more ambitious projects is to retain radio manufacturing in the United States As you no doubt are aware, American producers of electronics products for the home—radios, TVs, and other appliances—came under severe competitive pressure from overseas manufacturers in the 1970's. Many succumbed to the pressure. They went out of business and were absorbed by overseas manufacturers or moved their operations to locations outside this country.

GM was no exception to this trend. Delco Electronics Division, headquartered in Kokomo, which manufactures radios for installation in cars and trucks, was faced with a similar challenge. By 1978, factory installation of Delco radios had dipped to 82 percent from the over 90 percent figure in 1974.

Delco then embarked on an extensive program to improve its cost competitiveness. We decided to change our operating practices by managing more efficiently and by working to improve management/union relationships. Additionally, we decided we had to improve our product design and our manufacturing technology.

A new manufacturing concept was created with all parties involved at the very start of the product design phase. Manufacturing engineers worked with the product engineers so that the radio was designed with quality engineering and manufacturability in mind. And the manufacturing equipment and processes were conceived during the product design phase.

To complement our new approach to manufacturing, we invested over $200 million in the Kokomo plant. This money was invested in over 800 pieces of equipment for advanced manufacturing techniques and for a new semiconductor manufacturing facility—called Fab III—for state-of-the-art integrated circuit production.

The story of Delco Electronics' efforts to include more parts of its radio manufacturing in its U.S. operations is an unfinished one.

The rate of factory installations of Delco radios in GM cars has not only regained its previous levels but surpassed them. Our plan to bring production of radios back to the United States is proceeding.

What have we learned from this experience? Well, Kokomo has convinced us that we cannot move forward without utilizing the skills of all our employees. But with the cooperation of our employees and the use of the best technology, we can overcome the substantial competitive disadvantage we now suffer. And by becoming internationally competitive, we intend to preserve jobs in America.

For its part, we think the Government should recognize the impact of regulation on the international competitive position of domestic manufacturers.

For example, as you know, fuel economy regulations are hampering the attempt by domestic full-line manufacturers to respond to the foreign competitive challenge. With the price of gasoline declining and the economy growing, consumers are increasing their purchases of larger family-size cars. This is precisely the part of the market in which American manufacturers traditionally have had a competitive edge.

Our ability to satisfy this increased demand is hampered because of the current corporate average fuel economy standard [CAFE]. This is a standard which is doing little or nothing to promote energy conservation, but it is creating an opportunity for our overseas competitors. Clearly, in mandating CAFE standards, Congress did not intend to impair the international competitiveness of domestic full-line auto manufacturers.

We believe it is important that CAFE standards be relaxed to ensure that the standards which were set more than a decade ago under vastly different circumstances do not handicap American manufacturers in their efforts to become fully competitive with our overseas competitors.

More broadly, the large budget deficit, as you stated, Senator Quayle, threatens the balance and the durability of U.S. economic expansion. While intervention by the G-5 countries has succeeded in reducing the value of the dollar, this success will be short-lived unless we remove the monetary-fiscal imbalances created by our huge budget deficit. We urge you and your colleagues to continue to work to reduce the budget deficit by reducing Government expenditures.

Finally, the U.S. auto industry has a number of programs under way to reduce the competitive gap with our Japanese competitors. However, we still have some way to go before we close it completely. But we remain convinced that we will close this gap by fully utilizing the skills of our employees and by utilizing the most advanced technology available anywhere.

Thank you.

Senator QUAYLE. Thank you very much, Mr. Walton.

Next is Mr. Edwin MacKethan.

Mr. MACKETHAN. Thank you, Mr. Chairman. We appreciate the opportunity to comment on the issue of trade and employment. This is certainly a critical national problem.

The flood of imports has had an enormous impact on the auto industry, with thousands of people losing their jobs with the auto manufacturers and in the supplier industries. In the aftermath of the energy crisis and the deep automotive recession from 1980 to 1982, foreign cars have surged to a market share approaching 30 percent. Foreign car sales--80 percent of which are Japanese—now total 3 million units per year, almost double the level before the first oil shock. During the same period, Japanese truck volume has increased over fourfold to more than 900,000 units. The cost of these increasing volumes to the U.S. economy and American workers is estimated to be over 200,000 jobs directly involved in the production of cars and trucks and their parts.

The decision of the administration not to ask Japan to continue the Voluntary Restraint Agreement has led to a Japanese export program with a 24-percent increase in car exports to the United States. Last month the Japanese share of our car market rose to 27 percent, compared with 20 percent last year. This increased Japanese volume has substituted directly for domestic cars, which compounds the jobs problem. In Ford's case, this small car substitution has further impaired our ability to meet the Federal fuel economy—or CAFE—standards, and we have been forced to look at alternative actions to comply, which could also have negative impacts on employment.

Over the past several years, the combination of new external conditions, changed market demands, and new competitors created a 3-year long crisis in the auto industry and stimulated a response that some have called the greatest industrial revitalization in history. The domestic producers are still in the midst of that revitalization, of course, and we continue to work on those factors within our control in order to strengthen our competitiveness. At the same time, we are deeply concerned about the external factors affecting trade competitiveness over which the manufacturers do not have control.

I would like to recount briefly the progress we have made at Ford in becoming more competitive. First of all, product quality. This is our top priority, and since 1980, we have achieved more than a 50-percent overall improvement in car and truck quality. Second, as quality improves, so does productivity, and we have achieved a one-third productivity gain in our North American operations. In our drive to become more cost competitive, we have pursued aggressive streamlining throughout the company, achieving a net reduction of about $4 billion in annual operating costs. Importantly, we have accomplished all of this without sacrificing the future. Since 1980, Ford has invested $25 billion in new technologies and in new tools, equipment, and manufacturing processes.

We are particularly pleased with the achievements we have made in the area of human resources, with employees now being involved in matters heretofore reserved for management decision-makers. We have asked and encouraged our people to bring their intelligence, enthusiasm, and pride to work with them. Moreover, the UAW-Ford Employee Development and Training Program and the joint National Development and Training Center have been created to develop and provide training and educational opportunities for UAW-represented hourly workers. In the program's first 3 years alone, 25,000 employees have enrolled in at least one of the program's services. One of the most significant contributions made by the joint UAW-Ford efforts has been to provide assistance to workers whose lives have been disrupted by the forces of economic change. About half of the participants to date have been laid-off workers who have benefited from career day conferences, professional counseling, skills enhancement, job search training, and tuition assistance for education or retraining. These actions that we implemented when we had to close our assembly plant near San Jose, CA, have been widely cited as a model for employee assistance and outplacement. There were 2,400 employees displaced at San Jose, and to the best of our knowledge, virtually all of those who actively participated in the program and sought new jobs have found them.

We are proud of these achievements and we are determined to persevere in what is a process of continuous improvement in a tough competitive environment. Unfortunately, future employment in the United States will not be determined solely by industry's actions; it will depend also on the steps taken by Government to make production in this country more competitive.

Ford has been urging for some time that the United States and our trading partners take actions to restore exchange rate equilibrium, and we are encouraged by the recent developments to attack the problem of the overvalued dollar. In response to pressure from business, the Congress, and the public at large, this issue is finally on the administration's priority agenda. Most especially, the recent action of the Group of Five to improve the dollar's relationship with other major currencies is an important step. Since the G-5 announcement, the dollar's value has decreased against the deutsche mark by 8 percent and against the yen by 17 percent. The progress thus far is encouraging, but this near-term success cannot be sustained without tackling the fundamentals.

We believe that there are five key areas the Government must address to effect a long-term solution.

First, the most urgent priority is to reduce the Federal budget deficit. Cutting the deficit will put downward pressure on exchange rates and reduce this Nation's demand for foreign capital, thereby leading to a more competitive exchange rate for the dollar and to improved job opportunities for American workers.

Second, the United States must continue to insist on improved access to overseas markets for U.S. products—equal to the access we accord our trading parners. The message the administration is sending now will help. A strong followup will help even more.

Third, our trading partners, especially Japan, should take appropriate action within their own economies to encourage domestic investment and growth.

Fourth, the United States must try to avoid taking actions that reduce the competitiveness of American industry, such as through adverse regulatory policies and tax changes that reduce capital formation incentives.

Finally, the Government, along with our trading partners, must act to achieve balance and stability in exchange rates over the longer term.

In the meantime, the growing trade deficit means the United States is continuing to lose jobs and production. In September, the trade deficit hit an all-time high of $15.5 billion, in part as a result of the 24-percent increase in car exports announced by Japan when the restraint agreement with the United States was lifted last April. The near-term crisis is why we have backed tough legislation that would yield significant short-term results while we all work together to put the long-term solutions in place.

It is clear that the international trading system cannot long withstand the pressure of a $150 billion worldwide U.S. trade deficit. Our relations with Japan cannot withstand the strain of a $50 billion bilateral trade deficit. And we cannot stand the continuing erosion of jobs in our key industries and communities. We need definite near-term progress to reduce those trade deficits and to stem the loss of jobs, and we need to take parallel action on the fundamentals that can restore long-term balance.

Thank you.

[Material supplied for the record follows:]

POST 11-9-85

Japan Chips Said to Hurt U.S. Firms

ITC Finds 3 Calif. Companies Hit by Below-Cost Imports

By Stuart Auerbach
Washington Post Staff Writer

The International Trade Commission found unanimously yesterday that the three largest semiconductor-chip makers in Silicon Valley were injured by low-price competition from Japan.

The preliminary ruling by the five-member commission was the first step in a long governmental process to determine whether the Japanese have been selling computer chips at prices below their manufacturing costs in an effort to capture a large share of the U.S. market.

If the Commerce Department finds that the Japanese-made EPROM [erasable programable read-only memory] chips have been dumped illegally in this country, penalty duties will be assessed against them. These duties could amount, in some cases, to more than the chips are being sold for today, if the charges by the American companies are upheld. The three U.S. companies involved in the complaint are Advanced Micro Devices Inc., Intel Corp., and National Semiconductor Corp.

This case is one of several filed this fall by the financially battered U.S. semiconductor industry, which has been hit hard by an unexpected slowdown in computer sales and increased competition here and in overseas markets from aggressive Japanese manufacturers.

Sources said preliminary talks have begun toward a possible settlement in the most far-reaching case. That case involves a complaint by the Semiconductor Industry Association that U.S. makers have not been given a fair shake in the Japanese market over a long period.

Deputy U.S. Trade Representative Michael Smith is scheduled to hold talks on the industry complaints with his Japanese counterparts from the Ministry of Interna-

See CHIPS, C2, Col. 3

ITC Finds Harm In Below-Cost Japanese Chips

CHIPS, From C1

tional Trade and Industry in Tokyo in 10 days. These talks were described by industry sources as preliminary, however, and U.S. Trade Representative Clayton Yeutter told a Senate committee last month that the issue was too important to be papered over with a market-sharing settlement.

The ruling yesterday by the ITC was filed Sept. 30 against eight companies, including some of Japan's high-technology giants: Fujitsu Ltd., Hitachi Ltd., Matsushita Electric Corp., Mitsubishi Corp., NEC Corp., Oki Lit., Ricoh Corp. and Toshiba Ltd. They all denied the allegations in the complaint.

Intel's chief counsel, F. Thomas Dunlap, said the Japanese companies are practicing "predatory" pricing to gain a share of the U.S. market.

The U.S. makers charged in their complaint that an EPROM priced at $17 in January, when Japan aggressively entered the market, sold for only $4 in August. The U.S. companies estimated that it cost their Japanese rivals $6.34 to make the chip.

The ITC staff reported that a "sharp decline" in EPROM prices began in the middle of 1984, and by October had fallen as low as 10 percent of the earlier price.

A knowledgeable observer said the American firms were caught in a squeeze by their Japanese competitors, either having to drop prices below their costs to maintain their share of the market or keep their higher prices and lose sales.

ITC Chairman Paula Stern said the case concerns "the impact of imports on the economic health of a high-tech, multinational industry" that ships labor-intensive jobs overseas while retaining research and design and fabrication activities in this country. "The corporations within this industry base their production decisions on worldwide economies of scale, balancing enormous capital investment costs with relatively cheap labor rates."

For its final determination, the ITC must examine costs in each production step, wherever they occur, to determine how the law "applies to rapidly evolving, global, high-technology industries," she said.

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ntel to Shut Wafer Fab Plant, Cutting 450

By LORING WIRBEL

HILLSBORO, Ore. - Intel said last week it will close its Fab 5 emory wafer fabrication facility here by year's end, cutting me 450 employes, and that a much larger corporate-wide tback of operations is expected early next year.

he decision to close Fab 5 ms from Intel's withdrawal t month from the dynamic mory business (EN, Oct. 14), comes as a surprise nonethe- s, as Intel said at the time no offs were anticipated because he action, and that only 75 em- yes were dedicated to the amic RAM business. Those 75, ording to Carl Everett, Intel Memory Components division marketing manager, were to have been offered other positions within the company as part of the earlier plan.

In its statement last week, Intel said of the 520 workers in the Fab 5 facility, "Some will be placed in other jobs with Intel, while an estimated 450 will be laid off."

Moreover, corporate restructuring under consideration this quarter will likely lead to substantial layoffs, possibly 10 per cent of the workforce, in January, Intel said.

Broader Layoff Set

"Planning is under way for a broader, world-wide layoff scheduled for the first quarter of 1986 unless industry conditions improve," Intel said, adding "Such an action will likely be required to cope with the continued depressed industry conditions expected in 1986."

Although Intel officials said no details are being released at this time, and that it is premature to estimate the extent of the first quarter cuts, the predictions both of company insiders and industry analysts coalesced in the 2,000 to 3,000 range, amounting to a cutback of roughly 10 per cent of Intel's present world-wide staff of 23,300.

Layoffs will be tied to pruning of specific operations, an Intel spokeswoman said, and would not be made on a gross percentage basis.

Confirmation of Predictions

"We have absolutely ruled out across-the-board percentage cuts," she said. "Employes will be analyzed on an as-needed basis."

The immediate layoffs and plans for bigger cutbacks in early 1986 were seen as a further confirmation of predictions at a recent Intel analysts meeting that business conditions will not improve in the semiconductor industry before mid-year 1986 at best (EN, Nov. 4).

The Hillsboro layoffs are tied to Intel's earlier decision to drop dynamic RAMs from the company product line permanently. Of Intel's two Hillsboro wafer fabrication facilities, Fab 5 was dedicated in large part to dynamic RAM production. Rather than lease or sell the Fab 5 facility, Intel plans to keep a minimal amount of people on board for R&D work.

Outplacement services began immediately for the Hillsboro employes, although the bulk are not expected to depart before December.

The Intel spokeswoman said the company had deliberately disclosed the Fab 5 phaseout as early as possible in order to not leave employes in the dark as to company plans in the aftermath of the dynamic RAM departure. Similarly, the company warned of its plans for more possible layoffs now so that staff would be aware of possible cutbacks prior to the Christmas season, she said.

Arizona Division

The company has cut back staff by almost 2,000 since the beginning of the year, primarily at Santa Clara and Oregon sites. The new analysis will allegedly take a close look at operations of the special components division in Arizona, as well as offshore test and assembly facilities in Barbados, Puerto Rico, Malaysia, the Philippines, and Singapore. The spokeswoman emphasized that no area would be immune from cuts, including new fab facilities in New Mexico and Israel.

"We'll be using the same methodology everywhere (for cutback decisions)," she said. "I wouldn't rule any site out."

National to Cut 500 In U.S., Europe

SANTA CLARA, Calif. — National Semiconductor will lay off 500 employes in the U.S. and Europe, with the bulk of the layoffs coming from corporate headquarters in Santa Clara.

The newest round of reductions brings the total number of National layoffs in 1985 to 2,800, although 1,000 were the result of a Malaysian plant closing.

National president Charles Sporck buffered the layoffs with a promise to return to normal workweeks Jan. 6. The company had scheduled 41 shutdown days between last February and next January as a result of the semiconductor recession. Mr. Sporck said the firm would "do whatever we can to avoid future shutdowns."

The company also promised to begin awarding pay increases that were deferred during 1985 beginning April, 1986, with those evaluated and awarded raises first to receive the raises first.

A National spokeswoman said at least three-fourths of the layoffs will come locally. Employes affected will be notified on a staggered basis over the next 6 weeks, she said.

ESTIMATED U.S. SEMICONDUCTOR EMPLOYMENT

	Percent of All U.S. Employees[1]	1984 Total Semiconductor Industry Employment (1,000's)
Arizona	11.6	31.7
California	32.6	89.0
Colorado	1.1	3.0
Connecticut	0.4	1.1
Florida	3.2	8.7
Idaho	1.0	2.7
Indiana	0.4	1.1
Maine	1.0	2.7
Maryland	0.3	0.8
Massachusetts	4.2	11.5
Minnesota	0.4	1.1
Missouri	1.0	2.7
New Jersey	2.2	6.0
New York	9.6	26.2
Ohio	1.3	3.5
Oregon	3.0	8.2
Pennsylvania	5.3	14.5
Rhode Island	0.4	1.1
South Carolina	0.4	1.1
Texas	14.2	38.8
Utah	3.2	8.7
Vermont	3.2	8.7
Total Industry[2]	N/A	273.0
Total Merchant	N/A	126.0
Total Captive	N/A	147.0

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[1] 1982 U.S. Census of Manufacturers

[2] U.S. Bureau of Labor Statistics

Senator QUAYLE. Thank you very much.

Let me start off with a question that is generated by Mr. Crandall's closing comment that was like a rifle that shot and hit me right between the eyes. Where we are going to go in the auto industry vis-a-vis the Great Lakes? You heard his statement that, as far as any expansion of the auto industry, particularly with Japan coming over here and building plants, he feels it would go outside the Great Lakes area. Furthermore, there is an obvious trend in the auto industry toward multinational companies our auto companies hooking up with Toyota or Mitsubishi or what it may be. So that is of concern to me, which I would like to get into later.

Mr. Walton, we are deeply grateful for that new truck plant in Fort Wayne. I think it is going along magnificently. It is about 15 miles from my home town in Huntington. You made the decision to stay in the Great Lakes area in that particular plant. I would just like to get some comments from the other two witnesses about Mr. Crandall's rather shocking, to say the least, statement that you are going to go elsewhere. And basically I think he said, and he can correct me if he wants to, that they would have better labor relations elsewhere. There may be some other factors, but he certainly indicated that that was a point.

What about that? Is that true, accurate? What do you want to tell a Great Lakes Senator like myself who is very interested in not only Indiana, but the entire Great Lakes region?

Mr. WALTON. Senator Quayle, you mentioned the Kokomo plant. I also mentioned in my testimony we have a number of new plants under construction in Michigan and Missouri, which is in the industrial heartland if not the Great Lakes region, and in some States pretty close to that. By no means have we abandoned U.S. production or the industrial heartland. I think Professor Crandall mentioned our heavy investment, our ongoing investment right here in the United States.

I would tell you that as productivity growth increases, that does mean greater output per worker, fewer workers per unit output. But on the other hand, these very efforts to restore our industrial competitiveness mean that we are going to be able to maintain a greater fraction of production in the United States. And we have not, just to finish, we have not conceded an inch of territory to the Japanese—not in any single market segment.

Senator QUAYLE. What about the Great Lakes in particular? Is there a corporate strategy or thinking that is going on that there are probably better places in the country to build plants and to take your business?

Mr. WALTON. Well, if there is, I am not aware of it.

Senator QUAYLE. So you would say that the strategy would be pretty much as it has been in the past, that you would be willing to make the investments where you have had the investments in the past, that you will try to work out some of the productivity problems, competitive problems, et cetera, in the place that got you on your feet and got you started in the first place?

Is that accurate to say?

Mr. WALTON. I think it is. Again, we mentioned the new truck plant facilities. But I have to say, too, that we are not ruling out any spot in the United States. We are not going to say, hey, we are going to just come into those particular States.

Mr. **Crandall**. It has gone back and forth, depending upon freight rates, to some extent. But you might ask Mr. Walton why General Motors chose Tennessee for the Saturn project.

Senator **Quayle**. Yes, our Governor is interested in that and so am I. [Laughter.]

Any insight there you want to share with the committee?

Mr. **Walton**. No particular insight. As I say, we leave no stone unturned in terms of looking for a productive and useful site for our operations. I think our management has indicated a number of factors, but I would rather not get into any specifics.

Senator **Quayle**. Mr. MacKethan, what about this idea of possibly shifting away from the Great Lakes?

Mr. **MacKethan**. I do not think that there is going to be a shift. In fact, there are many reasons to remain in the Great Lakes. With the pressure to improve all our operations, one of the major improvements that is going on is the institution in this country of the so-called just-in-time inventory system. And that requires being close to your suppliers. Well, most of the suppliers are clustered in the Great Lakes area because that is where the auto industry has been for many, many years.

In our own situation, we are revitalizing our existing facilities, including those in the Great Lakes area, so I do not see a departure from the Great Lakes area. In fact, I see some movement toward it. Mazda, in choosing Flat Rock, MI, considered those very factors in deciding where to locate its plant. Unlike Nissan—which went down to Tennessee—it jumped right in the middle of the Great Lakes area, the auto industry's location.

Senator **Quayle**. I wonder if we might develop, I guess, a shopping list of factors that you consider when you are going to make an investment in a new plant. What do you look for? What are some of the key criteria that are on your mind? Maybe we can approach the issue from that direction.

Who wants to answer?

Mr. **Crandall**. I never built one.

Senator **Quayle**. But you have analyzed the way they built them, though.

What factors do you consider?

Mr. **MacKethan**. Obviously, there are all kinds of factors.

Senator **Quayle**. What are the top five?

Mr. **MacKethan**. In our own situation, we have not built what you would call greenfield sites. The most recent one was 5 years ago when we built the transmission plant in Batavia, OH. Most of our efforts have been toward revitalizing existing facilities. In the case of the Dearborn engine plant, for instance, we completely gutted it; there was nothing left but four walls. And we put a completely new facility inside the old building.

The same thing is going on in Atlanta and our Chicago assembly plants where we are producing our new Taurus and Sable front-wheel-drive family cars. So greenfield sites are not something that we have been actively into. I cannot claim to be——

Senator **Quayle**. Mr. Walton, give us the top five.

Mr. WALTON. Sorry, but I cannot give you a top five. I can give you a few of the factors. One of the factors, I think, that was mentioned in connection with the Tennessee operation was educational facilities. We realize that the future of the industry, for the worker in the auto industry, is moving toward the highly skilled workers. So we look for the ability to harness and use existing educational facilities.

And I might add, in the Kokomo area, in the Indiana area in general, we are working with Purdue University, the president of Purdue, on a joint program to further the educational training of our work force. So education is one of the factors.

Another factor, of course, is the infrastructure of community service facilities—that which is either potentially or actually available—and the cost thereof.

Another factor, historically true and still true, has to be proximity to suppliers, your transportation costs. For example, we heavily rely on domestic suppliers of steel in large part because we have very low transportation costs from those steel plants located close to our Indiana, Michigan, Great Lakes area plants.

So off the top of my head, I can give you these three factors, but I know that the list is much longer than that, and that there is no set—I could not give you a set of parameters or variables that you could put into a computer and then crank out.

Senator QUAYLE. No. But I would just like to get a feel for what you really do consider basic essentials when you start shopping around for plant development. And I am struck somewhat favorably by the one that you mentioned first; not saying that it is first, but education facilities are important. Because I happen to believe that that is one of the key factors on how we are really going to maintain and increase our productivity and competitive edge, not only in this country but around the world.

Another thing is how our dislocated workers become phased back into the system where they have been dislocated through no fault of their own. But they are going to have to receive some additional education, some training of different skills.

So I think that is certainly a key factor.

Let me go on to another subject. Mr. Crandall, do you see in your analysis a merging of the domestic auto industries going into joint ventures or corporate relationships with Japanese auto companies. Is this going to be a trend that will continue? Or how do you see the next 10 or 15 years from the corporate structure of the auto industry in this country if you had to make a prediction?

Mr. CRANDALL. You should never ask an economist to predict for 10 or 15 years. I do not think joint ventures here are as important as the fact that the Japanese companies themselves are coming without joint ventures.

Senator QUAYLE. Excuse me. I have to go vote. I will be back in about 10 or 15 minutes. Can you all stay? Is there any time problem? OK.

[Short recess taken.]

Senator QUAYLE. OK. If we can resume here.

I think before we were interrupted by a vote, I think Professor Crandall was going to tell us from his background in great economic analytical ability of what the corporate structure of the domestic auto industry is going to look like 10 years out, diversification, joining up with Japanese companies. What should we anticipate?

Mr. CRANDALL. It is hard to predict. What I was saying is that it strikes me that we do not necessarily have a tendency toward overlapping joint ventures. In fact, Honda, Nissan, and Toyota have all either come here alone or coming alone—Toyota the most recent——

Senator QUAYLE. And you think that will continue?

Mr. CRANDALL. Well, I do not know whether that will continue for the smaller companies. Obviously, the strategy for a smaller company is to get an American partner because it is risky, given the acceptance of their cars in this market, to try to build an assembly plant which produces 200,000 or 250,000 of their own models, the minimum efficient scale in assembly. But Nissan, Honda, and Toyota clearly think they can sell easily 200,000, 250,000 cars from a single assembly plant, and they have the technology; therefore, they do not need a partner.

I think if we see the Koreans coming as the next wave, they may need partners. If you see one of the European companies, other than Volkswagen or Renault, come here, they may well need a partner because of the limited demand for their nameplate.

Senator QUAYLE. Mr. Walton, what do you see?

Mr. WALTON. I think that is a pretty fair analysis. I am not sure I could add anything to it. I think, as Bob says, the Japanese appear to do things pretty well on their own—for example, Honda in Marysville, and Nissan in Smyrna. So I just am not sure I see any substantial growth in the tendency for joint ventures.

Senator QUAYLE. Do you see the auto industry continuing its diversification, like buying Hughes and companies like that?

Mr. WALTON. We do not really view that as diversification. We view that as an effort to improve the technology there in the car, built in, and of course, to improve the product itself—with electronics equipment, and computerized equipment on the vehicle. It is also an effort to improve the process technology. So those acquisitions are acquisitions, by and large, as I said in my testimony, to increase that technological edge that we seem to enjoy in the auto industry.

Mr. CRANDALL. I think I have a strong view on that, and that is that I do not believe that you will see diversification continue in large part because basic industrial companies in the United States do not diversify very successfully. They have an expertise and a narrow range of industrial activity, and they find it difficult to carry that over to other areas. And, in fact, the two companies sitting before you here today have gone through years of reducing their diversification until just recently, General Motors having shed glass manufacturing, Ford having shed aircraft manufacturing, operating a railroad, getting out of consumer appliances.

Mr. WALTON. Frigidaire.

Mr. CRANDALL. Yes, Frigidaire, Philco. In general, that is consistent with the results that most industrial companies do poorly when they try to diversify.

You may recall, Exxon was going to try to compete with IBM and they have not succeeded.

Senator QUAYLE. Do you have anything to add, Mr. MacKethan?

Mr. MacKethan. Well, the actions that we have taken, Senator, and I think largely those the rest of the industry has taken in this respect have been building on the strengths that we have and looking toward making a stronger technological auto industry.

We have been very selective in the ventures that we have gone into, to target specific needs and, at the same time, to build on the strengths within the company.

And I think it is also important to recognize that even with such a large acquisition as the Hughes one at General Motors, that we are auto companies and we shall remain auto companies in the preponderance ~~of our~~ business.

Senator Quayle. I have one final question, and that is: Are there specific unfair trade practices that are presently going on in the auto industry, and I guess, in particular, with Japan or any other countries? Are there any allegations that you see of unfair trade practices?

Mr. MacKethan. The auto industry was a forerunner of what we are now seeing. I think you are going to have a panel after this one that addresses electronics and telecommunications, which is in the thick of the battle on unfair trade practices.

The day when there were very severe restrictions in the auto industry, particularly in Japan, was some years ago, and that was a forerunner of what you are now seeing in the new industries of electronics and telecommunications.

Japan has modified most of those policies over recent years, but only after its own industry developed behind very strong walls prohibiting imports and prohibiting foreign investment in Japan. And when those barriers were reduced, it was pretty much a completed ball game so far as the Japanese market is concerned.

Senator Quayle. But specific unfair trade practices directly in the auto industry 'you are not alleging any?

Mr. MacKethan. I think the one remaining irritant that we have with Japan concerns some of the certification and vehicle specifications.

Senator Quayle. Getting into their market?

Mr. MacKethan. Getting into their market, yes. And why Japan simply does not just wipe all those out, we do not really understand.

At the same time, given the advantage that Japanese auto producers have in their cost structure, on top of the exchange rate problem, I think that Japan is not a market that you would find to be a large export market for the United States.

Senator Quayle. Is this fair criticism? Professor Crandall, do you agree that the entrance, access to the Japanese market for our auto industry, is excessively cumbersome compared to ours?

Mr. Crandall. I have not looked at it carefully, but clearly it typically is for almost any complex consumer product like this. And I agree with Mr. MacKethan, that it is strange that the Japanese do not simply eradicate these things given their tremendous advantage over us in producing cars. It is unlikely that we are going to export our vehicles to Japan.

In the first place, they have rather strong limitations on the size of cars that can be driven on their roads, the width of cars, so that would eliminate a large part of the large cars from General Motors or Ford; and in the smaller cars we simply cannot be competitive over here; how are we going to be competitive over there with reverse transportation charges?

Senator DODD. I apologize. I have four committees meeting this morning, and I have been going from DRG's to the nomination hearing——

Senator QUAYLE. That is the reconciliation for the revenues gone, right?

Senator DODD. Yes. They are all meeting at the same hour, so I apologize to the panel. I did really want to ask questions, but why don't I just submit them to you in writing. If that is satisfactory, we can move on.

Senator QUAYLE. Thank you, gentlemen, very much.

Our next panel is Mr. Michael Maibach and Mr. Collins.

Our first witness is Mr. Michael Maibach who is the representative for the Semiconductor Industry Association and Governmental Affairs Manager for Intel Corp.

Mr. Maibach, welcome.

STATEMENT OF MICHAEL C. MAIBACH, REPRESENTATIVE, SEMICONDUCTOR INDUSTRY ASSOCIATION AND GOVERNMENTAL AFFAIRS MANAGER, INTEL CORP., SANTA CLARA, CA; AND RICHARD E. COLLINS, INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, WASHINGTON, DC

Mr. MAIBACH. Thank you, Senator.

I appreciate the opportunity to spend a little time with you today talking about employment in our industry, and I might say in passing I was very interested to hear both the gentlemen from GM and Ford. Both are very good customers, and after IBM, Ford is our largest customer at Intel.

Speaking of microelectronics, we consider this to be an American success story. In New Jersey in 1947, Bell Labs came up with an invention called the transistor. By 1959, Dr. Robert Noyce, who is the founder of Intel, put a transistor on a sliver of silicon, and the Silicon Valley sprang up. This ushered in perhaps what we can term the information age, an age where man's knowledge could not only be stored electronically but recalled, analyzed and used with man's logic process. And that is what a microprocessor is.

If I might quote Tom Wolfe, author of The Right Stuff:

> America today is in the midst of a great technological revolution. With the advent of the silicon chip, information processing, communications and the national economy itself have been strikingly altered. This new technology is changing how we live, how we work and how we think.

Let's focus for a moment on the employment specifically in my industry. There are about 100 corporations, 60 of which in our business belong to the SIA, although we have new startups almost monthly, so we have to keep a running count.

Starting from scratch in 1959 with the invention, by 1975 just 16 years later, 121,000 employees had jobs with American semiconductor companies. Between 1975 and 1980, the annual compounded growth rate of employment was 13 percent, for a total of 223,000, almost doubling employment in 5 years.

From 1980 to 1984, the last 4 years, growth slowed to about 6 percent on an annual basis for an all-time high in our industry of 280,000. If you count up all the supply and service jobs that go along with that, that's employing every man, woman and child in the Indianapolis metropolitan area, for example.

Half of our payroll in the silicon business is in the United States and half non-U.S. employees, and yet 80 percent of the payroll is here. That is because most of the value is added here. At Intel, for example, we make all of our computer chips within the United States, but package them abroad; sort of like making the computer here and putting it in a box someplace else where the technology demands are not high.

There is a larger story to our industry, which is that these chips are really the heart and soul of the electronic products that we make in the United States. Last year, for the first time in manufacturing history, the electronics industry became the largest sector of manufacturing in the United States, over 2½ million people.

Products include watches, microwave ovens, defense systems, telecommunications, et cetera, but for all this good news there are some clouds on the horizon. And I think that is why you are having these hearings. In our industry in the last 11 months, American companies have lost 54,000 employees. That is 19 percent of our global work force in the last 11 months. Japanese semiconductor employment is down only 5 percent during this slump. We think something is going on given those figures.

I would like to give a few examples. In 1969, a company in Dallas, TX, was founded called Mostek by six gentlemen who put together some venture capital. By 1983 they were one of the world's largest producers of DRAM's and other memory devices in the computer business and had 10,000 employees. That was the end of 1983. Four weeks ago, they shut down Mostek completely.

At Intel we decided to do a survey, because we were concerned about our customer base. Three months ago we had our U.S. sales office call 84 of our best customers and ask how many jobs they had taken offshore in the last 12 months. Their response—and this was very unscientific—was 32,810 jobs going out of the United States in the last 12 months just in our customer base alone. As those jobs go offshore, to some extent other jobs go with them or are simply lost.

We think there are three reasons for the problems in the employment picture in our industry. One is the normal business cycle. Any industry has a maturation period, and we are in to ours. As you may know, there were nearly 100 automobile companies in the United States during this century, and now there are only 4 or so that manufacture. They had quite a shake-out and that is pretty typical.

We have over 100 chipmakers in this country, and there is a shake-out going on. We want the market forces and good management to handle those things as they get sorted out. But there are two other problems that we face, and that is the reason I have come from California to speak with you. One is U.S. Government activities that can help or hurt business in general. We find that certain Government actions increase the cost of capital and, therefore, inflate the value of our currency, discourage savings and investment on the part of our citizens, delay exports unnecessarily, and fail to adequately address key trade problems.

The third challenge we face is unfair Japanese trade policies; because they are our principal competitor I mention them. They have a substantially closed or protected domestic market and use that market from which to practice predatory pricing within the United States. As a matter of fact, last Friday in a 5-to-zero ruling, we had a preliminary judgment on EPROM dumping before the ITC in our favor, saying that, in fact, there is evidence of product dumping and resultant injury.

I do want to get to the Japanese questions in particular and then let my colleague speak.

Japan, as we all know, is an island that is fairly resource poor. They import nearly 100 percent of their energy, three-quarters of minerals and timber, and about half their food. The OPEC shocks of the early and mid-1970's reminded them of their vulnerability toward the importation of things that are necessary for the machine or industrial age or, as some call it, the oil age.

We think in the 1970's the Japanese made a conscious decision to target information age technologies. All that is needed, in our industry, anyway, is some silicon, which is a sand-like substance, and some good engineers perhaps educated at MIT.

Senator **QUAYLE**. Or Purdue.

Mr. **MAIBACH**. Or Purdue or someplace in Connecticut.

And so we think that they have targeted not only our industry, but information industries in general.

MITI, for example, has a program to develop in the next decade 14 technopolises, which are 14 Silicon Valleys, if you will.

In Japan we have enjoyed sales of only 10 percent of the Japanese market since records were kept back in 1972. We have 83 percent of the U.S. market, 55 percent of the European market, and 47 percent of the rest of the world. In other words, the American semiconductor industry beats their Japanese competitors anywhere in the world where we compete, whether in Europe, the United States, or any third nation you can name except Japan itself.

When tariffs were 15 percent on chips going into Japan, we had 10 percent of their market. Today the tariff is gone—still, 10 percent. When their currency was 180 yen to the dollar back in 1978—in other words, a 60-percent rise in the yen value vis-a-vis today—we had 10 percent of their market. This year, with the value of the yen down 60 percent, we had 10 percent of their market. Nothing seems to change the 10-percent rule that we have. Therefore, our industry has a 301 case before the Government and this Friday we may get a final ruling on that from the 301 Committee.

This guaranteed market share of 90 percent takes away a lot of the risk that we have to incur here in the United States, if you will. We have to compete in the United States in a very difficult and open marketplace. The Japanese do not have that same sort of situation In addition, they do not have a merchant semiconductor industry, as do we. One of our competitors, Hitachi, is a $20 billion conglomerate; whereas, Intel or National Semiconductor or AMD are about $1 billion each. We do not think the Japanese are making money in the chip business right now, and that is due to the dumping of chips in the United States.

I will call your attention to the Hitachi memo in the back of my remarks, which we found after it had been out with Hitachi distributors for about 3 months. It indicates: final AMD and Intel "sockets"—places where customers place our chips—"quote 10 percent below their price. If they re-quote, go 10 percent again and do not quit until you win." In addition, distributors are guaranteed a 25-percent profit no matter what.

Now, if they take us down to the point where we do not make any money and they will go 10 percent below plus 25-percent distributor profit, 35 percent below our cost, we do not think anybody in the world can make a chip for that price. And therefore, we have the dumping suit I alluded to on EPROM's. We think we are going to be successful next March when that is ruled on by the Commerce Department.

I will mention a couple of other things and then close. We saw the price of 256K EPROM's, which is a memory device that we invented at Intel in 1971, at about $28 at this time last year, go to $4 apiece this summer. You can imagine taking a $28,000 Mercedes and selling it for $4,000 today.

We had a situation in the early 1970's where we were not allowed as an industry to invest in Japan, nor could we have sales offices there. We had a situation that allowed for the formation of the cartellike structure that we have today, where six producers make over 80 percent of all chips in Japan.

Just a closing comment: The founder of AMD, Jerry Sanders, has called semiconductors the crude oil of the 1980's. These, indeed, are the heart and soul of the electronic or information age. If we are going to keep America first in these technologies, we need to protect our interests and to cultivate a business climate here in the United States that is helpful for producers like Intel.

I have not commented on the cost of capital and perhaps we can get to that and the budget deficit, during questions and answers.

[The prepared statement of Mr. Maibach follows:]

AMERICAN EMPLOYMENT OPPORTUNITIES IN THE INFORMATION AGE

Testimony of

Michael C. Maibach

before the
United States Senate

Committee on Labor and Human Resources
Subcommittee on Employment and Productivity

On behalf of

The Semiconductor Industry Association

November 12, 1985

An American Success Story

Tom Wolfe, author of The Right Stuff, has written: "America today is in the midst of a great technological revolution. With the advent of the silicon chip, information processing, communications and the national economy itself have been strikingly altered. This new technology is changing how we live, how we work and how we think".

In the book, Megatrends, John Naisbitt proclaims: "Of the ten major transformations taking place right now in our society, none is more subtle, yet more explosive than the megashift from an industrial to an information society".

Through hard work, vision, and applied physics, American engineers have brought the world to a new economic era. Some call it the computer age, others like Naisbitt call it the age of information.

Bell Labs' invention of the transistor in 1947, and Dr. Robert Noyce's placement of a transistor on a silicon chip in 1959 began an economic sea change that we are only just beginning to understand and appreciate.

Semiconductor Employment

The short history of the semiconductor industry is impressive in terms of job creation.

Starting from scratch in the early 1960's, worldwide employment of U.S. firms reached 121,000 by 1975. Over half of those employees were Americans, receiving 80% of total industry payroll.

The 1975-1980 period saw a 13% annual compound rate of employment growth, with employment over 223,000 in 1980. The next four years saw growth slow to 6%, with a peak level at 280,000 people in the industry's best year ever, 1984.

Intel's employment history is fairly typical. Founded in 1968 by just three individuals, we employ 23,000 today -- 15,000 in the U.S. alone.

For the first time this year, employment in overall electronics in the United States exceeded 2.5 million, making it the single largest manufacturing sector in the United States. Given the interdependence of semiconductors and electronic products generally, these employment numbers are significant in telling our story.

However, the impact of semiconductors goes well beyond electronics per se. These devices are virtually everywhere. We find chips in telephones, microwave ovens, defense systems, TVs, factory robots and machine tools. Indeed, after IBM, Ford Motor Company is Intel's largest customer. Integrated circuits control emissions, fuel economy, braking systems, as well as entertainment programming in automobiles.

Sudden Downturn

While not without it business cycles, trends in the U.S. semiconductor industry have always been up -- until this year. In 1985, however, dramatic and lasting shifts are occurring that threaten thousands of U.S. workers.

U.S. companies have done their best to minimize layoffs, imposing hiring freezes, salary cuts, elimination of overtime, . . . and the use of state "worksharing" programs.

Nevertheless, during the past eleven months, U.S. semiconductor employment has gone down 19%. That has meant job loss to 56,000 individuals; the lion's share within the United States.

One company, Mostek Corporation of Dallas, Texas went out of business entirely just weeks ago. Mostek was founded by a half dozen entrepreneurs in 1969, and employed over 10,000 as late as 1983.

Intel recently made an informal survey of 84 of its U.S. customers asking how many jobs had been transferred outside the U.S. during the past twelve months. The total was 32,810! Compounding this loss is the fact that such a job exodus affects not only the companies involved, but also supplier firms such as Intel, and countless service employees.

These employment losses go hand-in-hand with losses in profitability. Intel, Motorola, National Semiconductor, Texas Instruments and AMD all lost money during the third quarter of this year. At Intel, this was the first quarterly loss since our founding in 1968.

The Causes of Decline

There are three principal sources of our industry's current troubles. One is a substantial slump in sales as this economic cycle shakes out those least competitive in computers and electronics. This is normal as any industry matures, and can be handled through sound and far-sighted management. The market here must be allowed to work.

The second reason is a whole panoply of government actions which increase the cost of capital, discourage savings and investment, make it difficult to obtain export licenses, and provide inadequate protection from trade abuses.

The third challenge we face is unfair Japanese trade policies. These policies have continued for over a decade to limit free competition in the Japanese market while allowing for predatory pricing here in the U.S. market.

I'd like to deal with the trade issue first because it is causing the greatest current threat to our industry and to U.S. jobs.

A Targeted Industry

Because microelectronics and related fields require few natural resources, many resource poor nations have taken special notice of these industries. Certain Asian countries are especially involved, the clear leader being Japan.

As we know, Japan imports virtually all of its energy, most of its other natural resources, and a substantial amount of its food. Competing in the industrial age, therefore, has been a special challenge to that resource poor island. The OPEC "shocks" of the 1970's were constant reminders of their oil age vulnerability.

Thus, it should come as no surprise that Japanese industry and government have bet their economic futures on information age technologies. There is even a MITI program to establish 14 new "technopolises" throughout that country. Fourteen Silicon Valleys, if you will.

Government-corporate planning in Japan since the early 1970's has meant that our industry has never enjoyed more than about a 10% share of the Japanese semiconductor market since records began being kept in 1972. This fact prevails even though U.S. companies hold 83% of the U.S. market, 55% of the European market, and 47% of all other markets. This fact prevails even though Japanese semiconductor tariffs have dropped from 15% to 0% since 1972. And this fact prevails even though yen-dollar valuations have fluctuated as much as 60% over the past seven years.

In response to the closed character of the Japanese market and the grave threat posed by the dumping of semiconductors in the U.S. market, the Semiconductor Industry Association filed a 301 petition in June of this year. Our industry is too competitive to be frozen at a 10% market share forever in Japan -- the largest semiconductor market in the world outside of the United States.

Moreover, guaranteed market share at home allows Japanese semiconductor companies to effectively dump product in the U.S. and other world markets. Their corporate size

(Hitachi is an $18 billion company, Intel is a $1.2 billion company) allows them to absorb huge losses in quest of market dominance.

In EPROMs, a memory chip invented by Intel in 1971, we have seen a free-fall in prices during the past year. Last November 256K EPROMs were priced at $28 each. Today the Japanese have brought that price to $4, well below their cost of production.

In response, Intel, AMD and National Semiconductor filed a joint dumping suit on September 30. A dumping case in the DRAM area has also been filed by Micron Technologies.

It is clear to us that in our industry international trade lawlessness is the order of the day.

As Thomas Hobbes wrote of the state of nature, life there is "nasty, brutish and short." His theme was that government exists to establish order and decency. Clearly, international trade has become less than civil, as industries are targeted and protected, domestic content laws are enacted, . . . and cartels are formed to stifle market forces.

These Japanese practices -- market protection at home and dumping abroad have sharp employment impacts. Mostek was once a world leader in DRAM production. DRAMs were targeted by the Japanese first. Intel recently announced that it is leaving the DRAM business, with lay-offs of nearly 500 to result in Oregon next year. And EPROM dumping threatens the profitability of several leading firms. Moreover, they are the kind of technology drivers that we cannot afford to lose to Japan.

An SIA funded study done this year estimates that, had the Japanese market been open to American investment and sales, U.S. market share in Japan would be over 30% today. Taking this estimate of a 30% market share, additional sales by U.S. companies would have surpassed $2 billion in 1984. That translates into 36,000 U.S. jobs foregone due to market barriers in Japan.

So a key problem we face as an industry is unfair trade practices by Japan.

Partnership Needed

As the U.S. moves from a domestic to an international economic arena, government and business can no longer afford to be adversaries. While responsible regulation of the marketplace is still proper, so too are policies that enhance competitiveness and job creation. For example:

Cost of Capital

To keep the U.S. semiconductor industry competitive costs money. If our products are technology intensive, our research and "clean rooms" are capital intensive.

U.S. semiconductor firms have recognized this fact. No American industry has a better record on research and development (R&D) and investment. Last year, for example, Intel put 14% of net revenues into R&D. (The national average for manufacturing is 5%). At the same time, Intel put 20% of revenues into new plant and equipment.

The competitive problem is the cost of U.S. capital. Our Japanese counterparts pay one half the price we do for capital today.

The high cost of capital is an American problem. We have become a consumption society, with savings 5% of our GNP vs. 18% in Japan. The U.S. tax code encourages consumption, and penalizes saving and investment. Currently, federal budget deficits consume 50% of all available capital in America. Neither Americans nor their government have the "savings habit".

Symptoms of this crisis are everywhere. The trade deficit may reach $150 billion this year, and the Department of Commerce now tells us we're a debtor nation for the first time since 1914.

The dollar's high value reflects our profligate ways. It is like any commodity. Supply is realized in savings, demand in borrowing. When a commodity is in short supply, its value rises. Spend less, save more and its value decreases.

So fiscal responsibility must soon be restored within the federal government, or the economy will continue to under-perform its potential.

Tax Law is Trade Law

A growing number of Members of Congress are now recognizing that because U.S. tax policy has a very significant impact on the global competitiveness of U.S. companies, it too must be considered a form of trade law. Our tax system is "de facto" industrial policy, and at present it is encouraging the wrong types of U.S. industrial development. Borrowing is encouraged at the expense of saving, thus maintaining a higher U.S. cost of capital. At the same time, the highest effective tax rate is applied to the sector of our economy most affected by competition from abroad -- high technology manufacturing.

The U.S. Government recognizes that tax reform is necessary. What is critically needed to make that reform effective from a trade and competitiveness perspective is to make fundamental shift from a consumption-based tax system toward a savings-based tax system. Savings and investment are the lifeblood of our economy, and in particular of the information technology industries. Research and development, capital formation, and the prudent use of capital determine productivity growth, and ultimately, the standard of living of our citizens.

Our tax laws should reflect this fundamental fact. Yet the Treasury II tax proposal contains some provisions which are absolutely antithetical to the key issue of enhancing U.S. industrial competitiveness in information technology. Most seriously, the proposal would force U.S. information technology firms to depreciate their capital equipment at a very slow rate which is totally unrelated to the actual useful life of the equipment involved. Semiconductor manufacturing equipment, for instance, has a useful life of about four years and yet is classified in the same depreciation category as capital goods which have useful lives of twice that duration.

But of even greater concern to our industry is the Ways and Means Committee tax proposal which would impose a 20% penalty tax for R&D while cutting the R&D credit. Under this proposal, a semiconductor company which incurs a $100 million financial loss, but which performed $250 million in R&D during the year in which it experienced the loss (a realistic ratio for many semiconductor companies this year) would end up paying U.S. taxes.

These international competitiveness issues cannot be ignored (as they apparently were in the case of the Treasury II and Ways and Means tax proposals) in the preparation of our revised tax laws. To do so would risk completely offsetting the efforts being made in other areas of U.S. trade policy to revitalize U.S. industry's competitive strength on world markets.

Export Controls

Much has been said about the difficulty of exporting American technology even to our Western allies. We endorse the thoughtful recommendations of the President's Commission on Industrial Competitiveness. U.S. companies should not be at an export disadvantage given the existence of the COCOM mechanism.

Reexamine U.S. Antitrust Law

Finally, it is becoming apparent that the U.S. antitrust laws enacted around the turn of the century are based on an economic model which takes no account of international trade. Last year, the Congress wisely amended the antitrust laws to promote the creation of joint R&D ventures between U.S. companies. This law has already been widely utilized. Forty-five groups have already established or are now forming such ventures, including ten joint ventures in the electronics industry. It can be expected that the benefits of joint R&D will soon begin to be reflected in the marketplace.

SIA believes, however, that it is time to review our antitrust laws to consider possible ways in which they can be modified to reflect the new reality of a global marketplace and to improve the international competitive position of U.S. companies. We believe this can be accomplished without sacrificing the protection from anticompetitive behavior provided by the antitrust laws.

There are two areas of U.S. antitrust law which are most in need of review. One is the application of U.S. law to anticompetitive actions which take place outside of the United States. Where injury is done to U.S. companies by foreign actions or a foreign industry structure which would violate U.S. antitrust law, there should be some recourse under U.S. law. The other area to which consideration should be given is the possibility of permitting some joint manufacturing programs in the United States.

SIA will be conducting such a review during the coming months, and will hope to have the opportunity to work with the Congress in this process.

A Comprehensive U.S. Trade Policy

Our industry supports the conclusion of the President's Commission Industrial Competitiveness that the formation of a comprehensive trade policy must become a national priority. We also endorse the recent decision by the Administration to create a strike force on international trade issues under the leadership of Secretary of Commerce, Baldrige.

Only by taking that action can we avoid irrevocable damage to U.S. information technology industries in the short term and move onward to develop and implement the programs necessary to accelerate the growth of the information technology industries in the United States. SIA is anxious to work with the Congress to develop concrete policy proposals, along the lines of those I have presented here today, which can form the basis which will permit us to proceed with our long term economic growth.

Conclusion

Over the last one hundred years, the U.S. has emerged as the world's leading manufacturing economy because we had capital, natural resources, and ingenuity. Today, we are on the verge of a technological revolution that is transforming us from an industrial to an information society.

U.S. policies must be adapted to take account of these pressures and the inevitable evolution into an information society. They must give industries, and especially the vital semiconductor industry, the tools they need to continue to lead the world markets in this new era.

This means that we are talking about jobs here and now, as well as our prospects to continue to be the world's technological leader in the future.

THE INFORMATION AGE

AN AMERICAN STORY

1947	BELL LABS TRANSISTOR
1955	SHOCKLEY TRANSISTOR
1959	NOYCE/KILBY SEMICONDUCTORS

COMMENTS

JOHN NAISBITT, AUTHOR OF MEGATRENDS:

" OF THE TEN MAJOR TRANSFORMATIONS TAKING PLACE RIGHT NOW IN OUR SOCIETY, NONE IS MORE SUBTLE, YET MORE EXPLOSIVE THAN THE MEGA-SHIFT FROM AN INDUSTRIAL TO AN INFORMATION SOCIETY."

TOM WOLFE, AUTHOR OF THE RIGHT STUFF:

" AMERICA TODAY IS IN THE MIDST OF A GREAT TECHNOLOGICAL REVOLUTION. WITH THE ADVENT OF THE SILICON CHIP, INFORMATION PROCESSING, COMMUNICATIONS, AND THE NATIONAL ECONOMY ITSELF HAVE BEEN STRIKINGLY ALTERED. THIS NEW TECHNOLOGY IS CHANGING HOW WE LIVE, HOW WE WORK, HOW WE THINK.

W.J. SANDERS, CHAIRMAN, ADVANCED MICRO DEVICES, INC.

" SEMICONDUCTORS ARE THE CRUDE OIL OF THE 1980's."

GLOBAL SEMICONDUCTOR EMPLOYMENT

TRENDS 1984 TO 1985

COUNTRY	DEC '84	OCT '85	JOB LOSS	%
EEC	62,175	58,950	3,225	-5%
JAPAN	104,460	98,740	5,720	-5%
USA	280,000	226,000	54,000	-19%
OTHER	3,660	2,930	730	-20%
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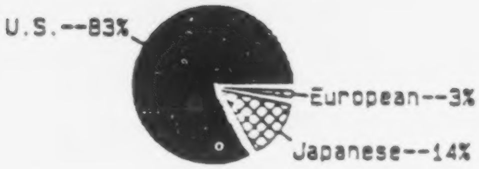
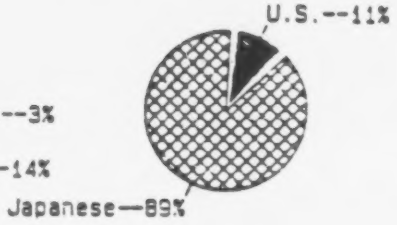
GLOBAL	450,295	386,620	63,675	-14%

SEMICONDUCTOR MARKET SHARE

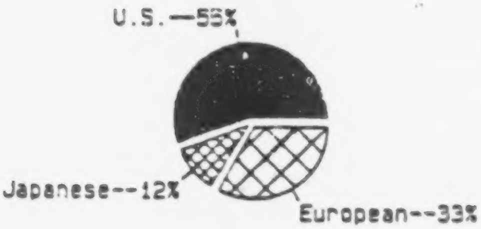
1984



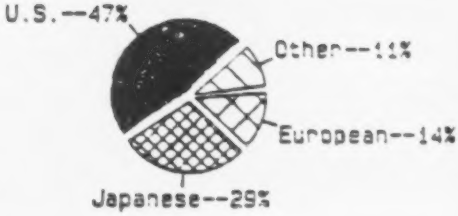
U.S. MARKET
$11.6 BILLION



JAPANESE MARKET
$8 BILLION



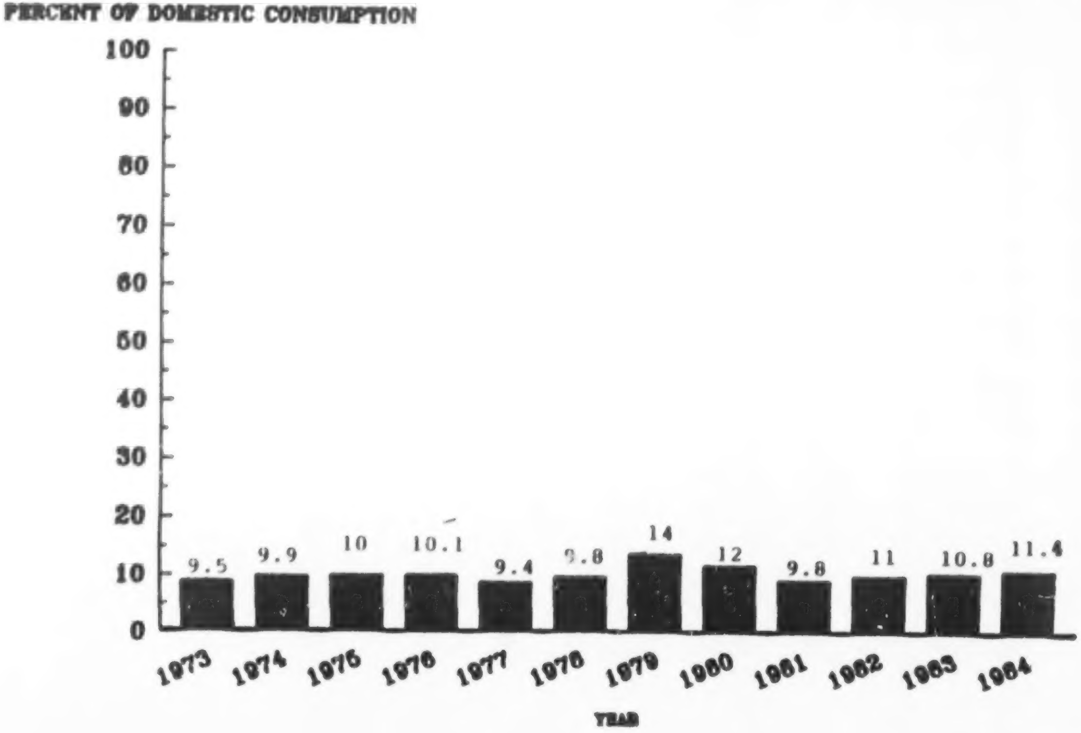
EUROPEAN MARKET
$4.74 BILLION



OTHER MARKETS
$1.7 BILLION

Figure 1

U.S. PENETRATION OF THE JAPANESE SEMICONDUCTOR MARKET HAS BEEN CONSISTENTLY LOW



MEMO TO
HITACHI DISTRIBUTORS
(FEBRUARY, 1985)

UNBEATABLE

PRICE LEADERSHIP

WE'RE NUMBER 1

40% BELOW INTEL AND AMD

— 15% - 20% BELOW OTHER JAPANESE SUPPLIERS

PRICE CROSSOVER

128K - 1.6 x THE 64K

256K - 2 x THE 128K

COST/BIT ATTRITION

CMOS PREMIUM SLASHED

27C64 - 25% OVER NMOS
AND HEADING FOR PARITY

WIN WITH THE 10% RULE

HN4827128, HN27256

FIND AMD AND INTEL SOCKETS....
QUOTE 10% BELOW THEIR PRICE...
IF THEY REQUOTE,
GO 10% AGAIN....
DON'T QUIT TILL YOU WIN!

HN27C64

WIN FUJITSU BUSINESS,
USE THE 10% RULE

25% DISTI PROFIT MARGIN

GUARANTEED

HN4827128, HN27256, HN27C64

HITACHI EPROMS

Senator QUAYLE. OK. Thank you very much, Mr. Maibach.

Our next witness is Mr. Richard Collins, the international representative for the research department of the International Brotherhood of Electrical Workers.

Mr. Collins.

Mr. COLLINS. Thank you, Senator.

My name is Richard Collins, and I am pleased to appear before this subcommittee on behalf of Charles H. Pillard, international president of the International Brotherhood of Electrical Workers. The IBEW represents over a million workers employed in various branches of the electrical, electronics and telecommunications industries. IBEW members are employed throughout the full gamut of the electrical/electronics industry.

However, I am sorry to report that many of the industries in which we once represented American workers in substantial numbers have been seriously impacted upon by the dual problem of massive foreign imports and the practices of our trading partners in restricting market access to U.S. exports. This point, without a doubt, is clearly underscored by the enormous trade deficit this country is faced with. The U.S. merchandise trade deficit surged to its highest level in history in September of this year when it reached $15.5 billion in a single month, with the greatest deficit coming in the manufacturing sector.

We believe it is of the utmost importance to look at some of the causal factors that are reflected in our enormous trade deficits and, thus, high levels of unemployment for American workers Indeed, the transfer of U.S. technology contributes substantially to the trade deficit and job losses, but there are other factors that contribute to this problem and we would like to speak to them. The relocation of manufacturing facilities by U.S.-based multinational corporations to foreign countries results in job losses for American workers. The importation of components, parts and subassemblies results in job losses. In fact, here in the U.S. today, employment in the television receiver industry stands at about 25 percent of what it was 15 years ago. This industry, like the semiconductor industry, was both born and developed in this country. Yet, in both industries, we have experienced job losses for American workers.

We seem to be constantly groping for an excuse or some malformed rationale to explain away our trade deficit problem. Today it is fashionable to speak of the over-valued dollar as the cause of our problem. Just a few short years ago, it was common to explain away our trade deficit problem in terms of the worldwide recession. In other words, we are always looking for an excuse to explain how and why our trade deficits have continued to escalate instead of addressing the real reasons for our trade deficit and job losses.

As an illustration, let us look at what has been happening in the telecommunications industry. The U.S. market is wide open and the markets of our trading partners are virtually closed. From January 1980 to June 1985, employment for production workers in SIC 3661, Telephone and Telegraph Equipment, declined in the United States by 21.2 percent. The IBEW has experienced about a 40-percent job loss in that category since 1981.

A closer look at employment at AT&T Technologies, formerly Western Electric, also indicates the employment trends in this industry. Combined IBEW employment at these plants is now about 30,000. This is just one-half what it was just 4 years ago. The plant where we represented employees at Lisle, IL, is closed. The plant at Kearny, NJ, which once employed as many as 17,000 workers, has closed. The plant at Indianapolis, IN, which once employed 7,000, has closed. Employment is down to 800 at the Hawthorne, IL, plant, which once provided jobs for 24,000. These job losses in the AT&T technology manufacturing sector are not included in the recently announced layoff of 24,000 at AT&T Information Systems.

IBEW employment losses in the telecommunications industry have not been limited to AT&T companies. We have experienced job losses also at GTE Lenkurt, Inc., GTE Communications System, GTE Automatic Electric, and ITT Business Communications. These are further examples of a deteriorating employment situation that telecommunication workers have been faced with.

The intensity with which foreign imports of telephone and telegraph equipment have overwhelmed the United States market is of a magnitude unforeseen by anyone. In 1983, imports increased by 93 percent; in 1984 by 44 percent; in 1985, it is anticipated by another 44 percent. This is expected to continue unabated without some strong action.

Another industry, as my colleague has explained, that has been targeted and severely impacted by imports is the semiconductor industry. The main source of increased imports of semiconductors has been from Japan. During the last full year, 1984, the Japanese exported to the United States semiconductors valued at $1.979 billion. During this same year, the United States exported to the essentially closed Japanese market $361 million in semiconductors. This resulted in a $1.618 billion deficit with Japan alone for this 1-year period. This alarming level of deficit has continued into the first 6 months of 1985. This is an industry where the United States developed the technology and is by any standards internationally competitive. These kinds of trade balances severely reduce domestic employment and the domestic operation of U.S. producers.

Senator Quayle, you and the other members of this subcommittee are to be complimented for drawing attention to the problems that increasing imports cause for domestic employment. In our presentation we have chosen to focus on two important industries that have been severely impacted by imports and employment problems. Certainly, there are other sectors of the electrical/electronics industry that have been impacted as well, but we have focused upon these two because of their importance to the domestic economy and because these are very technologically advanced and should be leading industries in the United States and world competition.

Analysis of the problems in these industries as well as the analysis of all our domestic industries should be done with domestic employment as the backdrop. For much too long now, the United States has followed policies that make it easy for capital to be transferred abroad, jobs follow capital, for our technology to be transferred to foreign locations, and to make it easy for U.S.-based multinational corporations to locate their manufacturing facilities abroad.

Senator, I know that you and the other members of this subcommittee are well aware of how important domestic employment is to this country. If at the present time this country was enjoying full employment rather than the extended, historically high unemployment rate, a great portion of the budget deficit could be eliminated. Full employment would ensure the stability of our Social Security System. Full employment would guard against the erosion of the standard of living enjoyed by American workers. This country must focus on programs and policies that will strengthen the industrial base of this country and promote full domestic employment. We must change these ruinous programs and policies that have resulted in the highest trade deficit in this Nation's history. It is time for action in developing programs and policies to promote domestic employment.

[The prepared statement of Mr. Collins follows:]

TESTIMONY OF RICHARD E. COLLINS
FOR
CHARLES H. PILLARD, INTERNATIONAL PRESIDENT
OF
THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS
BEFORE THE SUBCOMMITTEE ON EMPLOYMENT AND PRODUCTIVITY
OF
THE COMMITTEE ON LABOR AND HUMAN RESOURCES
U. S. SENATE

MY NAME IS RICHARD E. COLLINS AND I AM PLEASED TO APPEAR BEFORE THIS SUBCOMMITTEE ON BEHALF OF CHARLES H. PILLARD, INTERNATIONAL PRESIDENT OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS (IBEW). THE IBEW REPRESENTS OVER A MILLION WORKERS EMPLOYED IN VARIOUS BRANCHES OF THE ELECTRICAL, ELECTRONICS AND TELECOMMUNICATIONS INDUSTRIES. IBEW MEMBERS ARE EMPLOYED THROUGHOUT THE FULL GAMUT OF THE ELECTRICAL/ELECTRONICS INDUSTRY. SOME OF THE MAJOR AREAS IN WHICH THESE WORKERS ARE EMPLOYED ARE THOSE INVOLVING THE MANUFACTURE OF SWITCH GEAR AND SWITCHBOARD APPARATUS; MOTORS AND GENERATORS; INDUSTRIAL CONTROLS; ELECTRICAL APPLIANCES; ELECTRIC LIGHTING AND WIRING EQUIPMENT; TELEVISION RECEIVING SETS AND ASSOCIATED EQUIPMENT; TELEPHONE AND TELEGRAPH APPARATUS; SEMICONDUCTORS AND RELATED DEVICES; ELECTRICAL TRANSFORMERS AND POWER EQUIPMENT. THUS, YOU CAN SEE FROM THIS SAMPLING, THAT THE IBEW HAS EXTENSIVE REPRESENTATION IN THE ELECTRICAL, ELECTRONICS AND TELECOMMUNICATIONS INDUSTRIES.

HOWEVER, I AM SORRY TO REPORT THAT MANY OF THE INDUSTRIES IN WHICH WE ONCE REPRESENTED AMERICAN WORKERS IN SUBSTANTIAL NUMBERS HAVE BEEN

SERIOUSLY IMPACTED UPON BY THE DUAL PROBLEM OF MASSIVE FOREIGN IMPORTS AND THE PRACTICES OF OUR TRADING PARTNERS IN RESTRICTING MARKET ACCESS TO U. S. EXPORTS. THIS POINT, WITHOUT A DOUBT, IS CLEARLY UNDERSCORED BY THE ENORMOUS TRADE DEFICIT OUR COUNTRY IS FACED WITH. THE U. S. MERCHANDISE TRADE DEFICIT SURGED TO ITS HIGHEST LEVEL IN HISTORY IN SEPTEMBER OF THIS YEAR WHEN IT REACHED 15.5 BILLION DOLLARS IN A SINGLE MONTH, WITH THE GREATEST DEFICIT COMING IN THE MANUFACTURING SECTOR. IT IS PROJECTED THAT OUR TRADE DEFICIT WILL REACH OVER 150 BILLION DOLLARS THIS YEAR. THIS HUGE TRADE DEFICIT CLEARLY MANIFESTS ITSELF IN A DEINDUSTRILIZATION OF AMERICA. NOT ONLY IN THIS COUNTRY ARE WE LOSING JOBS IN OUR BASIC INDUSTRIES, BUT WE ARE ALSO LOSING JOBS AT AN ACCELERATED PACE IN THE SO-CALLED HIGH-TECH INDUSTRIES. THESE ARE INDUSTRIES IN WHICH WE HAVE BEEN INTERNATIONALLY COMPETITIVE BUT WE HAVE NOW LOST OR WE ARE IN THE PROCESS OF LOSING OUR COMPETITIVE EDGE SIMPLY BECAUSE WE HAVE TRADED AWAY OUR TECHNOLOGICAL ADVANTAGE. WE IN THE UNITED STATES ENJOY A STANDARD OF LIVING THAT PROVIDES US WITH A MEANINGFUL LIFE THAT WE ALSO WANT TO SEE CONTINUALLY IMPROVED. IT IS NOT POSSIBLE FOR AMERICAN WORKERS TO COMPETE WITH WORKERS IN SOME FOREIGN COUNTRIES THAT RECEIVE A FRACTION OF THEIR PAY AND WHO UTILIZE THE SAME TECHNOLOGY AND EMPLOY THE SAME MANUFACTURING PROCESSES. FOR EXAMPLE, A WORKER IN SHREVEPORT, LOUISIANA ENGAGED IN THE MANUFACTURE OF TELECOMMUNICATIONS EQUIPMENT CANNOT COMPETE WITH A WORKER IN SINGAPORE WHO EARNS $2 PER DAY AND UTILIZES THE SAME U. S. TECHNOLOGY AND MANUFACTURING PROCESSES. WE BELIEVE IT IS OF THE UTMOST IMPORTANCE TO LOOK AT SOME OF THE CAUSAL FACTORS THAT ARE REFLECTED IN OUR ENORMOUS TRADE DEFICIT AND THUS, HIGH LEVELS OF UNEMPLOYMENT FOR AMERICAN WORKERS.

INDEED THE TRANSFER OF U. S. TECHNOLOGY CONTRIBUTES SUBSTANTIALLY TO THE TRADE DEFICIT AND JOB LOSSES. BUT, THERE ARE OTHER FACTORS THAT CONTRIBUTE TO THIS PROBLEM AND WE WOULD LIKE TO SPEAK TO THEM. THE RELOCATION OF MANUFACTURING FACILITIES BY U. S.-BASED MULTINATIONAL CORPORATIONS TO FOREIGN

COUNTRIES RESULTS IN JOB LOSSES FOR AMERICAN WORKERS. THE IMPORTATION OF COMPONENTS, PARTS AND SUBASSEMBLIES RESULTS IN JOB LOSSES. IN FACT, HERE IN THE U. S. TODAY, EMPLOYMENT IN THE TELEVISION RECEIVER INDUSTRY STANDS AT ABOUT 25 PERCENT OF WHAT IS WAS 15 YEARS AGO. HENCE, INSTEAD OF EMPLOYMENT GROWING IN THIS COUNTRY AS THE MARKET GREW, U. S. EMPLOYMENT HAS DECLINED AND IT IS IMPORTANT TO NOTE THAT THIS IS AN INDUSTRY IN WHICH WE ONCE ENJOYED A CLEAR TECHNOLOGICAL ADVANTAGE. THIS INDUSTRY LIKE THE SEMICONDUCTOR INDUSTRY WERE BOTH BORN AND DEVELOPED IN THIS COUNTRY. YET, IN BOTH INDUSTRIES, WE HAVE EXPERIENCED JOB LOSSES FOR AMERICAN WORKERS.

SOME OF THE TRADE PROGRAMS SPONSORED AND PROMOTED BY OUR GOVERNMENT CONTRIBUTE TO OUR TRADE DEFICIT PROBLEM AND JOB LOSSES. TWO EXAMPLES ARE: (1) TARIFF SCHEDULES 806 AND 807 WHICH REQUIRE THAT TARIFFS BE PAID ONLY ON THE VALUE ADDED TO PRODUCTS MANUFACTURED IN PART OUTSIDE OF THIS COUNTRY; AND, (2) THE GENERALIZED SYSTEM OF PREFERENCES (GSP) WHICH PROVIDES DUTY FREE TREATMENT FOR PRODUCTS ON THE GSP LIST THEREBY RESULTING IN JOB LOSSES FOR AMERICAN WORKERS. CERTAINLY A SIGNIFICANT CONTRIBUTING FACTOR TO OUR TRADE DEFICIT AND JOB LOSSES PROBLEM IS THE OPENNESS OF THE U. S. MARKET AND THE RESTRICTIVENESS OF THE MARKETS OF OUR TRADING PARTNERS. IT IS UTTERLY RIDICULOUS FOR OUR NATION WITH THE WORLD'S MOST LUCRATIVE MARKET TO FIND ITSELF IN THE PREDICAMENT WE ARE IN TODAY. WE WANT SO STRONGLY TO BELIEVE IN THE PRINCIPAL OF FREE TRADE THAT WE HAVE BECOME BLIND TO THE REALITIES OF WORLD TRADE AND THE PRACTICES OF MULTINATIONAL CORPORATIONS.

WE SEEM TO BE CONSTANTLY GROPING FOR AN EXCUSE OR SOME MALFORMED RATIONALE TO EXPLAIN AWAY OUR TRADE DEFICIT PROBLEM. TODAY, IT IS FASHIONABLE TO SPEAK OF THE OVER-VALUED DOLLAR AS THE CAUSE OF OUR PROBLEM. JUST A FEW SHORT YEARS AGO, IT WAS COMMON TO EXPLAIN AWAY OUR TRADE DEFICITS PROBLEM IN

Combined, IBEW employment at these plants is now about 30,000. This is about one-half what it was just four years ago. The plant where we represented employees at Lisle, Illinois, has closed. The plant at Kearny, New Jersey, which once employed as many as 17,000 workers, has closed. The plant at Indianapolis, Indiana, which once employed 7,000, has closed. Employment is down to 800 at the Hawthorne, Illinois plant, which once provided jobs for 24,000. These job losses in the AT&T manufacturing sector are not included in the recently announced layoff of 24,000 at AT&T Information Systems. In the last thirty days, 1,875 manufacturing employees at the Shreveport, Louisiana, plant have been laid off; and 500 have lost their jobs at Omaha, Nebraska. It has been reported to us that within the next two weeks 1,000 workers will be laid off at a plant in Pennsylvania.

IBEW employment losses in the Telecommunications Industry have not been limited to AT&T companies. GTE Lenkurt, Inc., a subsidiary of General Telephone and Electronics, located in San Carlos, California, went from 1,100 employees in 1981 to the plant being closed and all jobs eliminated in November, 1983. GTE Communications System, formerly GTE Lenkurt, located in Albuquerque, New Mexico, has lost over 1,100 jobs, going from 1,700 employees in 1978 to its current level of 550 in 1985. GTE Automatic Electric, Inc., of North Lake, Illinois, has lost 1,500 jobs in just the last five years, going from 3,000 workers in 1980 to 1,500 being currently employed. Additionally, ITT Business Communications, a subsidiary of ITT Telecommunications, located in Des Plaines, Illinois, went from employing 140 IBEW members to closing down their operations in 1983. These are further examples of a deteriorating employment situation that Telecommunications workers have been faced with.

TERMS OF THE WORLDWIDE RECESSION. IN OTHER WORDS, WE ARE ALWAYS LOOKING FOR AN EXCUSE TO EXPLAIN HOW AND WHY OUR TRADE DEFICITS HAVE CONTINUED TO ESCALATE INSTEAD OF ADDRESSING THE REAL REASONS FOR OUR TRADE DEFICITS AND JOB LOSSES. AS AN ILLUSTRATION, LET'S LOOK AT WHAT HAS BEEN HAPPENING IN THE TELECOMMUNICATIONS INDUSTRY. HERE IS ANOTHER INDUSTRY IN WHICH WE ENJOY THE POSITION OF BEING ON THE LEADING EDGE OF TECHNOLOGICAL DEVELOPMENT, YET HERE IS AN INDUSTRY THAT IS BASICALLY EXPERIENCING THE SAME FATE THAT WAS EXPERIENCED BY THE TELEVISION RECEIVER INDUSTRY.

THE U. S. MARKET IS WIDE OPEN AND THE MARKETS OF OUR TRADING PARTNERS ARE VIRTUALLY CLOSED. FOREIGN IMPORTS ARE TAKING OVER MAJOR SEGMENTS OF THE TELECOMMUNICATIONS INDUSTRY IN THE UNITED STATES. U. S. COMPANIES ARE MOVING THEIR OPERATIONS OUT OF THIS COUNTRY TO FOREIGN LANDS AND ARE EXPORTING THEIR PRODUCTS BACK TO THE U. S. GIVEN THIS TYPE OF A SITUATION, HOW CAN AMERICAN WORKERS STAY EMPLOYED IN THIS INDUSTRY? THEY CANNOT! AND, WE OFFER THE FOLLOWING ACCOUNT OF WHAT HAS BEEN HAPPENING IN THIS INDUSTRY AS SUPPORTING EVIDENCE.

FROM JANUARY, 1980, TO JUNE, 1985, EMPLOYMENT FOR PRODUCTION WORKERS IN SIC 3661, TELEPHONE AND TELEGRAPH EQUIPMENT, DECLINED IN THE UNITED STATES BY 21.2 PERCENT. THE IBEW HAS EXPERIENCED ABOUT A 40 PERCENT JOB LOSS IN THAT CATEGORY SINCE 1981. OF COURSE, THIS ONE SIC CATEGORY DOES NOT COVER THE FULL RANGE OF PRODUCTS IN THE TELECOMMUNICATIONS INDUSTRY; BUT THE EMPLOYMENT EXPERIENCE IN THIS CATEGORY IS REPRESENTATIVE OF WHAT IS HAPPENING ON A BROADER SCALE.

A CLOSER LOOK AT EMPLOYMENT AT AT&T TECHNOLOGIES, FORMERLY WESTERN ELECTRIC, ALSO INDICATES THE EMPLOYMENT TRENDS IN THIS INDUSTRY.

The intensity with which foreign imports of Telephone and Telegraph Equipment have overwhelmed the United States market is of a magnitude unforeseen by anyone. In 1982 the United States had approximately a $200 million dollar trade surplus in this industry. In 1983 the surge of imports had changed that surplus to a $418 million trade deficit , a $600 million swing in just one year; and the condition was rapidly worsening. In 1984 the deficit in Telecommunications was over $1 billion, and projections for 1985 are for a deficit on the order of $1.7 billion. This means that from a $200 million dollar surplus in 1982 we will have gone to a combined deficit of approximately $3.1 billion for the years 1983-85. Under current conditions no end or relief from this surge is anticipated. In 1983 imports increased by 93 percent; in 1984, by 44 percent; in 1985 it is anticipated by another 44 percent; and this is expected to continue unabated without some strong action.

Another industry that has been targeted and severely impacted by imports is the semiconductor industry. The semiconductor industry in the United States consists of about 100 firms. The largest 20 of these firms produce 80 percent of the industry output. These industry leaders include Motorola, Texas Instruments, Data General, Intel, and National Semiconductor along with large corporations that produce largely for their own use, such as the Solid State Division of RCA Corporation, the Semiconductor Division of Westinghouse Electric Corporation, and the in-house operations of Western Electric, and General Electric. Although employment data is difficult to come by, that which is available indicates that about two-thirds of the employees of U.S. semiconductor firms are in foreign locations.

THE LABOR INTENSIVE WORK IS DONE IN THESE FOREIGN LOCATIONS. THE SILICON CHIPS ARE PRODUCED IN THE U.S., SHIPPED TO THESE LOCATIONS FOR PROCESSING, THEN SHIPPED BACK TO THE U.S. FOR THE FINAL TESTING. THIS PROCESS IS AIDED BY U.S. TAX AND TARIFF PRACTICES. FOR INSTANCE, THE TSUSA CODE 806.30/807 TARIFF, WHICH WAS AIDED BY A LAW CHANGE IN 1965, ALLOWS FOR THE TARIFF TO BE PAID ONLY ON THE VALAUE ADDED IN THE FORIGN PLANT ON PRODUCTS RETURNED TO THIS COUNTRY. IN 1984 MORE THAN $5 MILLION IN AMERICAN-OWNED DEVICES PASSED THROUGH OFF-SHORE PRODUCTION FACILITIES TO BE REIMPORTED INTO THE UNITED STATES UNDER TARIFF SCHEDULE 806.30/807.

THE MAIN SOURCE OF INCREASED IMPORTS OF SEMICONDUCTORS HAS BEEN FROM JAPAN. DURING THE LAST FULL YEAR, 1984, THE JAPANESE EXPORTED TO THE UNITED STATES SEMICONDUCTORS VALUED AT $1.979 BILLION. DURING THIS SAME YEAR THE UNITED STATES EXPORTED TO THE ESSENTIALLY CLOSED JAPANESE MARKET $361 MILLION IN SEMICONDUCTORS. THIS RESULTED IN A $1.618-BILLION DEFICIT WITH JAPAN ALONE FOR THIS ONE-YEAR PERIOD. THIS ALARMING LEVEL OF DEFICIT HAS CONTINUED INTO THE FIRST SIX MONTHS OF 1985. DURING THIS SIX-MONTH PERIOD, THE JAPANESE EXPORTED $829 MILLION TO THE UNITED STATES WHILE WE EXPORTED ONLY $138 MILLION TO THEM FOR A $691 MILLION DOLLAR DEFICIT OVER ONLY A SIX-MONTH PERIOD. THIS IS IN AN INDUSTRY WHERE THE UNITED STATES DEVELOPED THE TECHNOLOGY AND IS BY ANY STANDARDS INTERNATIONALLY COMPETITIVE. THESE KINDS OF TRADE BALANCES SEVERELY REDUCE DOMESTIC EMPLOYMENT AND THE DOMESTIC OPERATION OF U.S. PRODUCERS.

SENATOR QUAYLE, YOU AND THE OTHER MEMBERS OF THIS SUBCOMMITTEE ARE TO BE COMPLIMENTED FOR DRAWING ATTENTION TO THE PROBLEMS THAT INCREASING IMPORTS CAUSE FOR DOMESTIC EMPLOYMENT. IN OUR PRESENTATION WE HAVE CHOSEN TO FOCUS ON TWO IMPORTANT INDUSTRIES THAT HAVE BEEN SEVERELY IMPACTED BY IMPORTS AND EMPLOYMENT PROBLEMS. CERTAINLY, THERE ARE OTHER

SECTORS OF THE ELECTRICAL/ELECTRONICS INDUSTRY THAT HAVE BEEN IMPACTED AS WELL, BUT WE HAVE FOCUSED UPON THESE TWO BECAUSE OF THEIR IMPORTANCE TO THE DOMESTIC ECONOMY AND BECAUSE THESE ARE VERY TECHNOLOGICALLY ADVANCED AND SHOULD BE LEADING INDUSTRIES IN THE UNITED STATES AND IN WORLD COMPETITION. ANALYSIS OF THE PROBLEMS IN THESE INDUSTRIES AS WELL AS THE ANALYSIS OF ALL OUR DOMESTIC INDUSTRIES SHOULD BE DONE WITH DOMESTIC EMPLOYMENT AS THE BACKDROP. FOR MUCH TOO LONG NOW, THE UNITED STATES HAS FOLLOWED POLICIES THAT MAKE IT EASY FOR CAPITAL TO BE TRANSFERRED ABROAD (JOBS FOLLOW CAPITAL), FOR OUR TECHOLOGY TO BE TRANSFERRED TO FOREIGN LOCATIONS, AND TO MAKE IT EASY FOR U.S.-BASED MULTINATIONAL CORPORATIONS TO LOCATE THEIR MANUFACTURING FACILITIES ABROAD. ALL THESE POLICIES AND PROGRAMS SHOULD BE ANALYZED FOR THE ADVERSE IMPACT THEY HAVE ON DOMESTIC EMPLOYMENT. SOME OF THESE PROGRAMS THAT ADVERSELY AFFECT DOMESTIC EMPLOYMENT INCLUDE THE OVERSEAS PRIVATE INVESTMENT CORPORATION. THIS IS A GOVERNMENT AGENCY THAT INSURES PRIVATE INVESTMENT ABROAD AND SHOULD BE TERMINATED. BY INSURING THE CAPITAL TRANSACTIONS AND FACILITIES OF HUGE MULTINATIONAL BANKS AND FIRMS ABROAD, IT HAS SIGNIFICANTLY CONTRIBUTED TO THE EXPORT OF AMERICAN JOBS. TAX LOOPHOLES AND INCENTIVES FOR MULTINATIONAL COMPANIES TO MOVE ABROAD SHOULD BE ENDED, THE TAX DEFERRAL HALTED, THE FOREIGN TAX CREDIT REPEALED, AND THE DOMESTIC INTERNATIONAL SALES CORPORATION TAX GIMMICK ELIMINATED. ITEMS 807 AND 806.3 OF THE TARIFF SCHEDULES REDUCE TARIFFS ON PRODUCTS CONTAINING PARTS PRODUCED IN THE UNITED STATES. THESE PROVISIONS EXPORT AMERICAN JOBS AND SHOULD BE REPEALED. THE TRANSFER OF U.S. TCHNOLOGY MUST BE CONTROLLED TO ASSURE CONTINUED TECHNOLOGICAL ADVANCES, COMPETITIVE ADVANTAGE, AND NATIONAL SECURITY. AT THE PRESENT TIME U.S. CORPORATIONS RECEIVE SPECIAL TAX ADVANTAGES FOR THE RESEARCH AND DEVELOPMENT OF NEW TECHNOLOGY; BUT THEN ALL TOO OFTEN, A TRANSFER OF THAT TECHNOLOGY OUTSIDE THE UNITED STATES IS TO THE DETRIMENT OF DOMESTIC EMPLOYMENT AND THE COMPETITIVENESS

OF DOMESTIC INDUSTRY. THE GENERALIZED SYSTEM OF PREFERENCES SHOULD BE REPEALED. AT MINIMUM, CONGRESS MUST MAKE IMPORT SENSITIVE ITEMS INELIGIBLE FOR GSP, LIMIT ITS ACCESS TO COUNTRIES THAT CAN REALISTICALLY BE CONSIDERED DEVELOPING COUNTRIES, AND EXCLUDE COMMUNIST NATIONS FROM THE PROGRAM. THESE ARE JUST SOME OF THE PROGRAMS THAT HAVE PROMOTED THE TRANSFER OF AMERICAN JOBS TO FOREIGN LOCATIONS.

SENATOR, I KNOW THAT YOU AND THE OTHER MEMBERS OF THIS SUBCOMMITTEE ARE WELL AWARE OF HOW IMPORTANT DOMESTIC EMPLOYMENT IS TO THIS COUNTRY. IF AT THE PRESENT TIME, THIS COUNTRY WAS ENJOYING FULL EMPLOYMENT RATHER THAN THE EXTENDED, HISTORICALLY HIGH UNEMPLOYMENT RATE, A GREAT PORTION OF THE BUDGET DEFICIT COULD BE ELMINIATED. FULL EMPLOYMENT WOULD INSURE THE STABILITY OF OUR SOCIAL SECURITY SYSTEM. FULL EMPLOYMENT WOULD GUARD AGAINST THE EROSION OF THE STANDARD OF LIVING ENJOYED BY AMERICAN WORKERS. THIS COUNTRY MUST FOCUS ON PROGRAMS AND POLICIES THAT WILL STRENGTHEN THE INDUSTRIAL BASE OF THIS COUNTRY AND PROMOTE FULL DOMESTIC EMPLOYMENT. WE MUST CHANGE THESE RUINOUS PROGRAMS AND POLICIES THAT HAVE RESULTED IN THE HIGHEST TRADE DEFICIT IN THIS NATION'S HISTORY. IT IS TIME FOR ACTION IN DEVELOPING PROGRAMS AND POLICIES TO PROMOTE DOMESTIC EMPLOYMENT.

Senator QUAYLE. Thank you, Mr. Collins.

I think Senator Dodd has six more subcommittees he has got to attend this morning. He would like to go at this time.

Senator DODD. Thank you, Mr. Chairman, and my apologies to you and to the committee. These things happen periodically around here where everyone decides on a given morning they are all going to meet.

But let me thank you, both of you, for your excellent, excellent testimonies, and I think, Mr. Maibach, your charts and graphs in the back are tremendously beneficial and helpful as well.

The International Trade Commission, as you know, I am sure both of you are aware that last Friday they ruled that three of the largest semiconductor chipmakers in the United States have been seriously injured by low price competition from Japan. That is the beginning of a rather laborious and lengthy process that is going to take some time before there is apt to be any kind of redress at all for that conclusion.

I wonder if you might comment on that, both of you, that decision; how long it is apt to take and what suggestions you might make for improving that or expediting that particular process so that it becomes more meaningful.

No. 2, you both, I think, very adequately addressed the question of unfair competition. In fact, I wish we would eliminate the word free trade from any further discussion. I do not think there was any free trade when Adam Smith first described it. I do not know why people keep on referring to it. Fair trade seems to me a legitimate goal to hit or to shoot for, but free trade never existed, does not exist today, it is not likely to ever exist. I do not know why we keep on talking about it as some realistic goal. Fair trade, I think, seems to me to be at least something we can shoot for.

I wonder if you might discuss some of the other factors as well. You touched on the most important one in my own mind, but computer sales, you made reference to, Mr. Maibach, the slowdown in the particular area is certainly a part of the problem. Productivity rates, increased use of industrial robotics are having an impact, obviously, on employment as well.

I do not suggest by that question that I think that is the major problem, but I think most seem to agree that that is having a serious impact and possibly, Mr. Collins, you might even more specifically address the robotics question as it affects employment and what suggestions you might have for this committee and the Congress in addressing that particular arena.

So I have laid out two or three rather large questions, but I would appreciate if you would respond to them.

Mr. MAIBACH. I will go first since you mentioned the EPROM case. We are pleased with the decision. As you know, it is about a 12-month process to move a dumping case. In 12 months in our industry, you can almost lose a step in the advancement of product levels. Intel announced—and you have the news clipping—that we are getting out of the DRAM business which means 450 jobs in Oregon are going to be gone next quarter. Once you have a product washed away as we have—before EPROM's, the other memory device, DRAM's, has had a dumping problem, as a matter of fact, there is a dumping suit on DRAM's—you get out of the business, because if you do not develop X you cannot develop Y.

We would like to see an amendment to the trade law that depending on the technology, would move that clock up to 6 months instead of 1 year. Perhaps more importantly, right now there are no penalties exacted once you are convicted, if you will, of dumping in this country. It is as if someone steals your car, and the police catch them, they get to keep your car but they are told never to steal a car again.

If we succeed with our dumping case, our industry estimates that we have lost $600 million in sales on EPROM's, which represents $60 million in R&D lost in the last 1½ years. But we are not going to get that from the Japanese even if the United States finds them guilty.

So we would like to see damages, if you will, levied just like any other civil case.

And on the larger question, just to close my comments, if you read American history, of course, you know when we had the Articles of Federation, we had trade wars among our States, because we simply did not have rule of law among the 13 States. That was one of the prime reasons why we got the Constitutional Convention and, therefore, the interstate commerce clause. We simply could not have a commercial society with States having trade wars—you know, Vermont would not let in Connecticut's maple syrup, et cetera.

Our overall view of trade is that until we have rule of law in the trade system—and GATT is completely inadequate—things will be like the state of nature, as Hobbes said, "nasty, brutish and short". And I will say that things are very nasty right now in the trade arena where people will do just about anything to make a sale.

Senator DODD. Mr. Collins.

Mr. COLLINS. Senator, I certainly agree with the comments you made about fair trade, and that is something most of us in organized labor have been talking about for quite some time. I appreciate your comments in that respect.

Concerning the introduction of robotics into the workplace, American workers have experienced technological change over the years, and I think our record has been good in that respect; that we have not opposed technological change.

We look upon robotics as another step in the change that has been occurring in production facilities. Robots represent another tool that workers can use in producing products. But the new generation Robots have the potential to displace workers, especially assembly workers in large numbers.

I think, however, the change that robotics will bring into the workplace as well as the trade deficit and the tremendous numbers of imports that have come in do point up the need for programs to help workers in this adjustment process. And one of those programs that has been greatly curtailed that we feel should be strengthened and improved, as I am sure you are well aware, is the Trade Adjustment Assistance Program, the help in that kind of adjustment.

And then the need for training and retraining of workers to be qualified in the types of jobs that will be made available in our changing workplace is very, very important.

Senator DODD. I would just comment on that. I appreciate your mentioning the trade adjustment assistance. I think in the past, the trade adjustment assistance at least, I do not believe this has actually been the case, but the perception is—and I think too often it is closer to the perception than not—is that it has been a paycheck and we will see you later. Sorry you lost your job; we believe you lost it as a result of trade practices, and good luck. Certainly that does not make a whole lot of sense at all. And I think if we maybe even pare down trade adjustment assistance, couple it directly with some retraining—and I know the Senator from Indiana has been deeply interested in this as well—we would do a lot better. I think there is great dissatisfaction with trade adjustment assistance in the fact that it has really not been as much of a retraining program as I think it could have been and enjoyed far broader support. And it has to go through that fight, you know, all the time to get additional levels of trade adjustment assistance, and it is the same argument year in and year out. I think if we did couple it more with retraining we could do a lot better in building that kind of base of support in the country for it.

I would like to send to both of you, and I would send it as well to the last panel, Senator Lloyd Bentsen of Texas says—along with Senator Hart, I might add, and I believe there are some on the Republican side of the aisle—I have been working on a rather comprehensive trade proposal, and I would like to send it to both of you. And I think we would be very interested, those of us who are cosponsoring that bill, we would be very interested in your comments on it.

It is rather far reaching, a very thoughtful approach. I would tell you quite candidly it is not a short-term solution. It does not get into what are called protectionist bills, if you will, and unfortunately, that word has taken on an evil connotation for some unknown reason to me. I do not know what is so evil about trying to protect American industry, business, and jobs, but it has. But I would be appreciative of your comments on that legislation. It will be very helpful to us.

I thank my Chairman for letting me go ahead of him here this morning, and I thank both of you for being here.

Senator QUAYLE. Thank you, Senator.

I might just pick up on that Trade Adjustment Assistance. What we have been trying to do is to get the training aspect of Trade Adjustment Assistance into title III of JTPA. Now, we have had some resistance in some quarters on that, but from a programmatic point of view, it makes a great deal of sense that additional moneys ought to be put into title III and administered and targeted to these industries that have a lot of economic dislocation because of the import situation.

So I would just throw that out, Mr. Collins, and hope that maybe you might be able to help us out when the time comes. I am trying to get some additional moneys in specifically for title III of JTPA. I think it would be foolhardy for us just to have another program when we already have an ongoing program that is supposed to be dealing with the dislocated workers.

Mr. Maibach, if the ITC decision were quicker than 12 months, would that plant in Oregon be saved, or is that basically gone?

Mr. MAIBACH. No. It is too late for that plant.

Senator QUAYLE. It is too late for that?

Mr. MAIBACH. Oh, yes.

Senator QUAYLE. Are there other plants that are going to be closing, do you think, as this thing drags on, or do you know?

Mr. MAIBACH. Yes. I think that there is going to be substantially increased dislocation if we do not stop the predatory pricing that is going on.

You know, the volume of chips is not down as much as revenues are. They—the Japanese—have taken all the profit out of the business, if you will. We make two kinds of chips: the memory chip and the microprocessor. One just remembers things and one is a computer on a chip. The memory business is where you make most of your revenues and drive your manufacturing technology. You put the profits from the memories into microprocessor R&D. It is sort of like McDonald's, which makes most of its money from their cokes, not their hamburgers. The Japanese have targeted memories first. If they take away those first, we have lost our technology and profit drivers to build the microprocessor.

So we have seen static RAM's and dynamic DRAM's and now EPROM's under attack. If we lose all three of those, you lose your strong technology base and profits.

Senator QUAYLE. I noticed in your oral testimony you chose to focus upon the ITC ruling and the trade issue, but as I was reading through your statement, it was far more comprehensive than trade policy. You mentioned the deficit; you talked about tax structure.

Mr. MAIBACH. Right.

Senator QUAYLE. How would you prioritize the issues that are affecting your industry? Is it trade? Is that the key one? Is it the capital, cost of capital? I know they are all important, the value of the dollar, et cetera, access to other markets, but do you have any kind of priority of interests?

Mr. MAIBACH. Well, I think trade is our No. 1 issue because even when the dollar's value was 50, 60 percent lower 5 to 7 years ago, we still could not sell into the second largest market for chips, which is Japan.

So we really have to get our trade relationship squared away with the Japanese no matter what.

Senator QUAYLE. Do you have better access now? Is it worse? The same?

Mr. MAIBACH. It has been 10 percent no matter what happens——

Senator QUAYLE. Ten percent.

Mr. MAIBACH [continuing]. For 12 years, 13 years now. It is simply 10 percent no matter what happens. As I mentioned, their tariffs used to be 15 percent and we had 10 percent of their market. When their tariffs became 8 and then 4.2 and then zero, 10 percent. Back in 1978 we had a weak dollar. It was 60 percent weaker vis-a-vis the yen, and we had 10 percent. That is how they do business there, Senator.

I would like to comment on the cost of capital. Our cost of capital as an industry is twice as high as in Japan. Intel, for example, we do not give any dividends to our shareholders. A hundred percent of revenues are put back in the business, to pay our people or to build new plant and equipment. We put about 20 percent of net revenues back in the new plant and equipment last year and 15 percent into R&D. The average manufacturer does about 5 percent. So we are putting 35 percent into the future of our business.

We have a high cost of capital because we are a consumption society. Our savings rate is about 4½ percent of our net income as a society. The Japanese save about 18 percent. They are very good savers, and there are reasons for that. The U.S. Tax Code encourages people to spend. If you put your money in the bank, the interest that you earn is taxed; but if you spend money and get a bill from Mastercard, that interest is deducted. That seems to us to be backward.

We simply tell people through the Tax Code the wrong things. Specifically, Treasury II is a $60 billion tax shift from individuals—or voters or consumers—to businesses. Business is your best saver in this society. Business saves about 60 percent of net revenues, called retained earnings. So individuals are saving 4 percent and companies are saving 60 percent. Treasury II says we are going to tax companies $60 billion more and give consumers $60 billion more to buy VCR's and Sonys, et cetera. That is the exact opposite message we ought to be sending with tax reform. We endorse, for example, some sort of a business transfer tax, that would tax consumption rather than income or investment.

Senator QUAYLE. Mr. Collins, to the people, the folks that you represent, would trade be their top issue? Do they feel that that is the thing that is costing them their jobs or that threatens their jobs?

Mr. COLLINS. Certainly, the trade deficit has impacted us very severely, Senator, as we have testified here today. And the point we are attempting to make in this testimony is that we do not believe the answer to that deficit problem is just a simple answer. We do not believe that just correcting the imbalance of the dollar, though it may improve the situation, is going to be the answer to the problem.

And we feel also that for too long the United States has followed policies that make it relatively easy to move jobs outside the United States. We believe there should be more analysis of how these various policies affect domestic employment. And those are the kinds of things that we would like to see as far as the trade issues.

Senator QUAYLE. Well, gentlemen, thank you very much for your very fine and detailed testimony, and with that the committee will stand in adjournment.

The final hearing will be later this year or next month on trade adjustment assistance and title III programs.

[Additional material supplied for the record follows:]

STATEMENT OF THE
INTERNATIONAL UNION, UNITED AUTOMOBILE, AEROSPACE AND AGRICULTURAL IMPLEMENT WORKERS OF AMERICA (UAW)

to the

SUBCOMMITTEE ON EMPLOYMENT & PRODUCTIVITY
SENATE LABOR AND HUMAN RESOURCES COMMITTEE
on
THE EFFECT OF TRADE ON THE U.S. AUTOMOBILE INDUSTRY

We hope to contribute to this subcommittee's examination of the impact of trade on the auto industry and the employment of its workers. Imported vehicles have flooded into the U.S. market during the past six years, disrupting the structure of the industry and many related industries. The misguided trade policies of the U.S. government, combined with conflicting economic policies, have seriously undermined our industrial base and spread the import problem through the entire goods-producing sector of our economy. This has caused, indirectly, further weakening of the domestic auto industry and the demand for its output. We are pleased to have this opportunity to show the dramatic impact of these policies on the workers in the industry. We also will present a chilling prospect for continuing employment declines in the absence of new trade measures to prevent them.

Using public data, we have computed sales of domestic and imported cars and trucks from 1978 through September, 1985. Automotive trade, in total and with our major trading partners, is also provided for 1978-1984 and the first half of 1985. These figures may be found at the end of this statement.

The trade figures show the tremendous growth of the value of imports since 1978. Excluding Canada, because U.S. auto production is in large part integrated with Canada's, the U.S. trade deficit in the automotive industry rose from $8.8 billion in 1978 to $25.7 billion in 1984. From 1978 to 1984, U.S. auto industry exports were unchanged, while imports more than doubled. Through the first half of this year, the trade deficit was $17.8 billion, an annual rate of $35.6 billion. If this level is reached, it would represent growth of 38.5 percent from 1984. The deficit is up most sharply with Japan and Europe.

In passenger autos alone, through September, 1985, sales of imports are up 13 percent from the year earlier period, while domestic sales rose by only seven percent. Imports increased their market share by a full percentage point to 24.0 percent. Prior to the imposition of the Voluntary Restraint Agreement, the import share of U.S. auto sales reached more than 27 percent. Since 1982, European imports, with no restraints, have held a steady share of U.S. sales, while the Japanese share, during the VRA, rose in 1981 and 1982 to 27.9 percent, up from 26.7 percent in 1980, before falling to 18.3 percent in 1984. In 1978, when all imports took just 18 percent of the U.S. market, the Japanese had a 12 percent share.

In the truck segment of the market, the import share jumped sharply in 1979 and 1980, reaching almost 20 percent in 1980 and 1981. The 1978 share for imports was only 7.9 percent. The increase in total sales in the past couple of years has failed to restore the total truck market to its 1978 level. Domestic sales in 1984 were well below 1978, while import sales had almost doubled.

Since these figures do not disclose the increased imports of parts for assembly in domestic cars and trucks, they understate the impact of imports on the industry. The loss of engine, transmission and other parts production to imports causes the same job loss for our members as the import of completed vehicles.

This strong growth in imports and in the import share of total sales has had a profound effect on employment in the auto industry. At the major U.S. auto producers (GM, Ford, Chrysler, AMC and Volkswagon of America), UAW membership fell by nearly 200,000, or 27 percent between 1978 and 1984. For the U.S. auto industry, as a whole, we have calculated a loss of about 350,000 jobs over that same period.

While imports in the 1978-84 period caused a significant loss of U.S. production and many lost jobs for workers, we believe that this period's difficulties will be overshadowed by the increase in imports from now to 1990. The plans of GM, Ford and Chrysler to import cars and purchase others made by joint ventures or foreign companies in the U.S., but with a relatively large proportion of imported parts, will lead to reduced U.S. production and many fewer jobs for the American auto workers even if total U.S. sales grow.

The UAW has made projections for 1988 which show how serious the car segment of the auto industry's employment situation will be. We expect imports from Japan for sale by Japanese companies to increase from 1.7 million in 1984 to 2.6 million in 1988. Imports from Japan for sale by U.S. auto companies will grow from only 100,000 in 1984 to 500,000 in 1988 if only the already announced plans are carried out. European imports are expected to increase modestly from their current 500,000 level. Added to these, however, will be 100,000 cars imported by Ford for its own sales. By 1988, there will be new sources of significant imports. Plans of Ford and GM to bring cars in from Korea will add 200,000 and Ford and Chrysler will import 160,000 from Mexico. In addition, Hyundai, which began selling cars in Canada last year, should add 130,000. With these quite conservative assumptions, the total number of imported cars in 1988 comes to 4.3 million - nearly 1 million will be sold by U.S. companies. This compares with total imports of 2.4 million in 1984. The overall increase in imports would, then, be 80 percent.

The UAW welcomes, but is also concerned by the growth of so-called "transplant" vehicle production in the U.S. These cars are made here by foreign companies, or by joint ventures of foreign and U.S. firms. Plants now in operation turned out 370,000 cars in 1984. These 3 operations will grow to at least 8 in 1988, producing 1.4 million cars. Our current experience with these plants, and the announcements made by the companies involved, lead us to believe that a large proportion of the total value of these cars will be imported from Japan, Mexico and other countries. The value of U.S. production and labor in these vehicles will only add up to 30-40 percent of the total.

In terms of generating employment for Americans, these vehicles are not in the same league as the over 90 percent U.S.-content cars now made by the U.S. companies.

If we assume a strong auto market of 11.2 million sales in 1988, we have projected that it will be met by 4.3 million imports and 1.4 million transplants, leaving room for 5.5 million fully domestic car sales. In 1984, sales of such high U.S. content domestic cars were 7.6 million. The total impact of this shift to imports and imported major components would be a decline of about 25 percent in U.S. auto employment, eliminating hundreds of thousands of jobs. The fully assembled import share would be 33 percent, compared to 23.5 percent in 1984.

We believe these assumptions about the growth in import share are conservative. There is a considerable potential for even greater import penetration, both from captive imports of the U.S. companies and imports from foreign producers. Anyone who thinks our projections are too pessimistic need only consult a study of the U.S. Department of Commerce from April which estimated a 36 percent import share and 4.0 million imports in 1988. We in the UAW are hardly alone in our concern that the auto industry is on the verge of unprecedented import competition and employment losses. The plans of GM, Ford and Chrysler to dramatically expand their own imports are a blow to our members and to the companies' domestic suppliers, which have little chance of making sales to the foreign makers of small cars. This situation could have been avoided if our government had developed an appropriate response to the problem caused by imports back in 1981.

While developments in the truck segment will be less dramatic, the import share is expecteed to continue to climb. The vast majority of trucks sold are in the small size classes. Imports have gained a large share of this market, but it is unlikely to rapidly grow. In the larger truck market, several foreign producers have recently joined with U.S. companies to produce vehicles here, but they have increased imports of parts in the process. We expect the value of imports to continue to grow in this important market segment.

We believe that trade in automotive products has led to the loss of several hundred thousand U.S. jobs and that another employment decline of similar proportions lies just beyond the horizon. This second major job loss will occur even if the total U.S. market for cars continues to grow. There can be no doubt that our auto trade deficit is responsible for these difficulties. Only appropriate government trade policies can prevent the next round of job losses from occurring.

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Automotive Trade by World Region, 1978-1985
($billion)

		1978	1980	1981	1983	1984	1985 (Jan.-June)
Japan	Exports	0.2	0.2	0.2	0.2	0.2	0.1
	Imports	8.2	11.4	13.0	14.9	18.5	11.7
	Balance	-8.0	-11.2	-12.8	-14.7	-18.3	-11.6
W.Europe	Exports	0.9	1.3	1.3	1.1	1.1	0.6
	Imports	5.1	6.2	5.4	7.2	9.4	6.7
	Balance	-4.1	-5.0	-4.1	-6.1	-8.3	-6.1
Canada	Exports	9.3	8.9	10.1	12.2	15.4	9.3
	Imports	10.4	8.6	10.4	16.6	22.6	12.6
	Balance	-1.1	0.3	-0.3	-4.4	-7.2	-3.3
Latin America	Exports	2.0	2.9	3.6	1.5	2.3	1.3
	Imports	0.6	0.6	0.8	1.7	2.5	1.7
	Balance	1.5	2.3	2.8	-0.3	-0.2	-0.4
Total	Exports	14.5	15.9	18.0	16.8	20.6	12.2
	Imports	24.3	27.1	29.7	40.8	53.5	33.3
	Balance	-9.9	-11.2	-11.7	-24.0	-32.9	-21.1
Total w/o Canada	Exports	5.2	7.0	7.9	4.6	5.2	2.9
	Imports	14.0	18.5	19.4	24.2	30.9	20.7
	Balance	-8.8	-11.5	-11.4	-19.6	-25.7	-17.8

Source: FT 990, Highlights of U.S. Export and Import Trade, by "end-use" commodity category. Imports f.a.s. for 1978, 1980; customs value for 1981, 1983-85.

Note: Due to rounding, figures may not balance as shown.

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AUTO INDUSTRY SALES: DOMESTIC AND IMPORTED CARS

	1985 (Jan.-Sept.)		1984		1983		1982	
	#	Mkt Share	#	Mkt Share	#	Mkt Share	#	Mkt Share
Domestic	6,532,500	76.0%	7,951,523	76.5%	6,795,299	74.0%	5,756,658	72.1%
Imported	2,067,466	24.0%	2,438,842	23.5%	2,386,772	26.0%	2,223,087	27.9%
Japan	1,599,870	18.7%	1,906,204	18.3%	1,915,621	20.9%	1,801,481	22.6%
Europe	467,596	5.3%	533,088	5.2%	471,151	5.1%	420,733	5.3%
Total Cars	8,599,966	100.0%	10,390,365	100.0%	9,182,071	100.0%	7,979,745	100.0%

	1981		1980		1979		1978	
	#	Mkt Share	#	Mkt Share	#	Mkt Share	#	Mkt Share
Domestic	6,205,856	72.7%	6,578,252	73.3%	8,225,425	77.9%	9,158,346	82.1%
Imported	2,327,279	27.3%	2,400,332	26.7%	2,331,819	22.1%	2,002,383	17.9%
Japan	1,858,622	21.8%	1,908,235	21.2%	n/a		1,355,886	12.1%
Europe	468,484	5.5%	490,048	5.5%	n/a		646,527	5.8%
Total Cars	8,533,135	100.0%	8,978,584	100.0%	10,557,244	100.0%	11,160,729	100.0%

n/a Not Available

Source: Ward's Automotive Reports; Ward's Automotive Yearbooks; UAW Research Dept.

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TRUCK SALES: DOMESTIC AND IMPORTED

	1985 (Jan.-Sept.)		1984		1983		1982	
	#	Mkt Share	#	Mkt Share	#	Mkt Share	#	Mkt Share
Domestic	2,970,635	83.5%	3,485,441	85.2%	2,665,961	85.2%	2,149,544	84.0%
Imported	586,901	16.5%	607,758	14.9%	463,513	14.8%	410,337	16.0%
Total	3,557,536	100.0%	4,091,199	100.1%	3,129,474	100.0%	2,559,881	100.0%

	1981		1980		1979		1978	
	#	Mkt Share	#	Mkt Share	#	Mkt Share	#	Mkt Share
Domestic	1,812,750	80.2%	2,002,638	80.5%	3,112,967	86.9%	3,921,860	92.1%
Imported	447,575	19.8%	484,598	19.5%	469,429	13.1%	336,002	7.9%
Total	2,260,325	100.0%	2,487,236	100.0%	3,582,396	100.0%	4,257,662	100.0%

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Research and Education

Industrial Robots and Workers

It may appear to some people that industry is taking a step into the pages of science fiction, but realistically the step is another move in technological growth, as industry enters the age of robotics. Not only are several of America's largest corporations making major commitments to using industrial robots, but a widening variety of manufacturers are now buying robots. The IBEW has never opposed technological growth, nor have we opposed the introduction of industrial robots. We believe that technological innovation and growth are essential to a healthy economy, productivity growth, and improved living standards for everyone. We, as do most Americans, enjoy the conveniences made possible through technology; however, we also place a high value on the lives of American workers, job safety, and job security. Therefore, while we do not oppose this latest step in technological growth, we do believe that it is necessary to study the impact of industrial robots on humans in the work place.

We are fully aware of the fact that corporations are in business to make profits and that new technology is introduced to aid their competitiveness and enhance their profitability. However, it is our belief that corporations also have a social responsibility, which can be fulfilled only by their fully addressing the impact of technology on humans at the work place. Such responsibility must include job safety and job security. It is becoming fashionable to say that technology displaces workers, instead of replacing workers. Unless consideration is given to new job opportunity through employer-assisted training and/or education or through transfers, displacement of workers becomes the same as the replacement of workers--outright job losses.

MORE

The integration of industrial robots with human workers on the assembly line creates the potential for dangerous situations to arise that could result in injury to humans working alongside or in the vicinity of robots. An industrial robot on the assembly line could malfunction and cause physical harm to human workers; it could cause them mental distress; its programming could be changed by error and cause it to react violently, posing safety problems to the workers nearby. Pursuant to the Occupational Safety and Health Act (OSHA), it is the responsibility of each employer to furnish to his employees employment and a place of employment which are free from recognized hazards that could cause physical harm to the employees.

The IBEW strongly believes that the social responsibility of corporations includes the duty of utilizing industrial robots in those situations or work places in which workers would be exposed to toxic materials, areas that would be hazardous to workers' health, or confined, cramped areas in which human workers would find it impossible or extremely difficult to work for an appreciable length of time.

Types of Robots

Although some industrial robots are built like human torsos, enablin them to fit into assembly-line benches like human beings, they do not resemble the mechanical man envisioned by most people who hear the word, robot. In fact, they usually look like just another piece of machinery, except that they have arm-like projections and grippers to do assembly-line work. The first generation robots, nothing more than mechanical arms essentially, have been utilized in many factories throughout the world for about 20 years. The new generation of robots can see with their TV camera eyes; the more sophisticated robots are able to "see" and "feel" with vision, touch, and force sensors that feed back into a computer. Generally, there are two classes of industrial robots--limited-sequence robots and computer-controlled robots. The limited-sequence type is the simplest version, pick-and-place robots that pick up something from one spot and place it at another spot. They have electrically- or pneumatically-activated arms that move in two to three directions, each movement recorded in the robot's memory in sequence.

Servo robots, which include programmable, computerized, sensory, and assembly robots, are the most common. They have one or more servomechanisms which enable the arm and gripper to alter direction in mid-air, without having to trip a mechanical switch. They have five to seven directional movements and operate from either electrical or hydraulic power. Programmable robots are directed by a programmable controller that memorizes a sequence of arm-and-gripper movements. The routine can be repeated continually, or the robot can be reprogrammed by having its gripper led through a new task. The computerized robot is, of course, run by a computer, and new instructions can be relayed to it electronically. The sensory robot is computerized and has one or more artificial senses, usually sight or touch. The assembly robot is computerized and likely to be a sensory model; it is designed especially to do assembly-line work. For light, batch-manufacturing applications, the arm of the assembly robot may be fairly human-like. It is primarily for batch-assembly operations, which comprise 75 percent of all manufacturing operations, that more and more robots are now being considered. Robots are already employed in casting, spray-painting, welding, loading and unloading, and assembling and sorting parts.

Further Threats

Microprocessors are now making it possible to have robots with multiple arms and/or grippers, so that the robots are capable of coordinating many different movements; microprocessors are also speeding up the teaching process, developing a "smarter" line of robots. It is believed that the next step forward in the manufacture of robots will be the integration of sensory systems with more-sophisticated computer software to allow robots to "make" limited decisions. What it boils down to is that the newer generations of robots will be more sophisticated and will be able to perform more-complex jobs that are not confined to boring, harmful, limited conditions; in other words, the more sophisticated the robot, the more sophisticated job it will take on. Where will that leave American workers who will be confronted with new challenges and new problems? These continuing changes will affect the jobs, livelihoods, and life stylesof workers. Workers must not be threatened continually by newer and improved robots. The increased utilization of robots will, of course, displace existing jobs. While some jobs will be eliminated, others will undergo job content changes and skill requirement changes. New jobs may also be created.

To the worker, the loss of his job--whatever the cause (the introduction of robots or any other changing technology, a recession, foreign trade, etc.)--is a major catastrophe; the worker who is less educated and less skilled is further handicapped in finding a new job. Management must realize its social responsibility in assisting these displaced workers.

Solutions

It takes a long time from management's initial study and deliberations until its decision to invest in additional technology and then the actual installation of such technology; in this case, robots. Therefore, we believe that it is incumbent upon management to give ample advance notice about plans for technological change and the expected effects upon the job situation. We believe that robots should be installed in plants when displaced workers can be absorbed into other jobs and that management should assist with the training, retraining, and vocational education needed by displaced workers to perform other jobs. Decreases in employment should be accommodated through attrition--reduction of the work force by natural turnover, deaths, retirements, and voluntary resignations. Displaced workers should be offered substantially equivalent or better job opportunities, along with the training or education needed to hold such jobs. They should be guaranteed adequate financial assistance while training for such jobs or while seeking other jobs, and they should be protected against the loss of such benefits as vacation, retirement, health and welfare, etc. We believe that the settlement of differences created by the introduction of robots into industry and the negotiation of reasonable and humane means of protection for the workers should be met in collective bargaining sessions between management and the union. It is during such talks that adjustment procedures allowing for a minimum of disruption in the workers' personal lives and in their jobs should be ironed out. Again, we stress our firm conviction that the introduction of robots to an industry should not conflict with laws and rules to protect the safety and health of workers. The Occupational Safety and Health Act, state and local safety and health regulations, and safety provisions within collective bargaining agreements should be revised as necessary to include specifics regarding the safety of workers who must work alongside robots. Together, management and labor can peacefully work out the introduction of robots or any other advanced technology to an industry while protecting the job opportunities, safety, and health of all workers to the mutual benefit of both and the economy of the nation.

Senator **Quayle**. Thank you very much. The hearing is now adjourned.

[Whereupon, at 12:05 p.m., the subcommittee adjourned, subject to the call of the Chair.]

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